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Land Use Planning and Water Quality in North Carolina

Sprawl in Denver

Recent Trends in Manufactured Home Zoning Law

Housing Regulatory Costs: Who Pays in the End?

Revolving Loan Funds in North Carolina

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From the Editors:

This *Carolina Planning* includes a variety of articles that present the viewpoint of both practicing planners and academics. This issue contains discussion of more recent topics such as regional growth management and zoning for manufactured housing; in addition, new perspectives on existing issues such as housing regulations and water quality are also presented. The articles reflect the multidisciplinary nature of the planning field, encompassing topics such as law, public policy, and housing finance. We will continue to make *Carolina Planning* a forum for such diverse discussion.

The new style introduced in the last issue has been further updated, and we have improved CP's layout to make it clearer and more readable. CP Notes continues to provide Internet resources and sites of interest for planners, in addition to information on upcoming conferences and events. Planner's Digest has been reintroduced in order to allow shorter treatment of planning issues and events. This issue's Planner's Digest covers the 1999 Weiss Urban Livability Symposium taking place this spring.

We hope you enjoy this issue, and as always, we welcome any articles, reviews, interviews, and news items for our summer issue, as well as general letters or comments concerning our publication.

Philip Hervey
Jessica LeVeen
Laurence Lewis
Caroline Wells

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CP NOTES

Articles on the Web

‣ **Western Architecture in Arab Cities.** The *Christian Science Monitor* examines the influence of western architecture on Arab cities in "For better and worse, Arab cities try on a Western look." The article, for example, laments the appearance of Beirut as it rebuilds from a lengthy civil war: "a drab, cement-box style of architecture, along with overpopulation, noise and pollution."

http://www.csmonitor.com/durable/1999/01/05/p7s1.htm

‣ **Newspaper series on growth, sprawl.** Several newspapers have published on-line versions of in-depth series examining issues such as sprawl-inducing highways, preservation of open space.

The *Washington Post* series, "Green, More or Less: Washington's Vanishing Open Space," can be found at:

http://www.washingtonpost.com/wp-srv/local/longterm/library/growth/front.htm

The (Portland) *Oregonian*'s series, "Legacy on the Line" examines growth management efforts to preserve millions of acres of farmland.

http://www.oregonlive.com/special/issues/growth.html

The (Raleigh, N.C.) *News & Observer* has an an-line version of its series, "Driving Forces. Urban Sprawl in the Triangle."

http://search.news-observer.com/plweb-cgi/nao_search.cgi

The *Las Vegas Review-Journal*'s series "Does Growth Pay for Growth?" can be found at:

http://www.lvrj.com/lvrj_home/in-depth/packages/growth/index.html

The *Denver Post* has published a series called "Growth in the '90s."

http://www.denverpost.com/news/gro0207a.htm

The *Denver Post*'s "Reclaiming the Rockies" series ran in 1997.

http://www.denverpost.com/news/mtn/mtn.htm

Conferences

‣ **1999 APA National Planning Conference.** The American Planning Association's 1999 national conference will be in Seattle April 24 to 28. The conference will offer approximately 200 sessions and 85 mobile workshops. The deadline for early registration and student volunteer applications passed in early February.

Important dates to remember include March 3, the regular registration deadline; March 10, the deadline for hotel reservations

made through the APA; March 24, the Seattle Tour registration deadline.

The cost is $110 for APA members registered by March 3; $130 if registered by April 5. The cost for Non-APA members: $580 by March 3, $620 by April 5.

For information:

http://www.planning.org/conferen/98indx.htm

National Town Meeting for a Sustainable America. The President's Council on Sustainable Development is sponsoring a conference, a National Town Meeting for a Sustainable America, May 2 to 5 in Detroit. For information through the mail, the address is: The President's Council on Sustainable Development, 730 Jackson Place NW, Washington, DC 20503. The organization's phone number is: (202) 408-5296. Or simply access the web site:

http://www.sustainableamerica.org.

Job Search

Looking for a job in planning? The web offers plenty of sites to aid your search. Here is a sampling of web sites:

- The American Planning Association: **http://www.planning.org/jobs/**
- ConsultantSearch: **http://www.planning.org/switchbd/directry.htm**
- Government: **http://www.govtjobs.com/**

  http://www.jobsingovernment.com/
- Nonprofit: **http://www.nonprofitcareer.com/**

  http://www.idealist.org
- Other sites: **http://www.geocities.com/CollegePark/7442/jobs.html**

  http://www.arch.buffalo.edu/pairc/wwwboard_planning_job_listings.html

Planner's Digest

Traditional Urbanism Reconsidered: The 1999 Weiss Urban Livability Symposium

Charles C. Bohl

It would be impossible to discuss urban livability without confronting the concept of urbanism - its many, varied forms, historical basis, aesthetic qualities, functional performance, and urban lifestyles. The 1999 Weiss Symposium at the University of North Carolina at Chapel Hill campus presents a unique end-of-the-century opportunity to reflect on traditional urbanism, and to ponder the future of urbanism in a world where the importance of local communities and a sense of place are increasingly challenged by technological advances, globalism, and the commodification of urban places. Presenters and participants will consider and debate the contemporary relevance of traditional urban forms as more sustainable, livable alternatives in an age of sprawl.

Traditional Urbanism Reconsidered

There is a long overdue need to move beyond the simplistic city-versus-suburb dichotomy that has dominated discussions of metropolitan development since World War II. Proponents of traditional urbanism emphasize the need to distinguish between different types of urban forms – hamlets, villages, neighborhoods, districts, towns, and cities of various sizes. The presenters at the symposium will help distinguish between these historical urban forms and discuss the implications they hold for contemporary metropolitan development.

There is also a need to further explore the social, civic, and symbolic functions of traditional urbanism. Previous conferences and events have invariably focused on the implications of alternative urban forms for transportation, the environment, and market and regulatory factors for housing and commercial development.

The neglect of research on social, civic, and quality of life issues is due, in part, to the difficulty in researching these issues and translating the results into effective policies. Yet quality of life issues are at the heart of efforts to promote more compact development as witnessed, for example, in New Jersey's "Communities of Place" initiative.

Weiss Symposium presenters have explored the social and cultural experiences, opportunities, and meanings associated with traditional urban settings. Their backgrounds allow for a cogent discussion of the relevance of these settings for contemporary demographic and technological trends and lifestyles.

The symposium will explore the meaning of concepts such as place identity, civic life, public realm, and sense of community in a changing world – where computers and communications technologies make it increasingly viable to work, form "communities of interest," and acquire goods, services, and knowledge without leaving the home. These two thrusts – the consideration of traditional urban forms and the social and civic functions of traditional urbanism – provide a rich intellectual tapestry for presenters and participants to consider and debate.

Urbanism: Old and New

The emphasis of the symposium is on traditional urbanism, drawing on the five millennia of experience and precedent in the creation, experience, and sustenance of urban places. However, the symposium will also be an opportunity to observe the latest reconnaissance with the theory and practice of urban place-making in the form of the new urbanism.

The reconsideration of traditional urbanism is not simply a historical or nostalgic exercise. The past decade has witnessed an explosion of interest in alternative development models based on "traditional" urbanism. What began largely as an architectural and urban design movement has blossomed into a national and international debate over growth and redevelopment involving planners, citizen groups, policy makers, and academia. Well-known paradigms being advanced include Andres Duany and Elizabeth Plater-Zyberk's neotraditionalism, Peter Calthorpe's pedestrian pockets and transit-oriented design, and Leon Krier's urban quarters.

Collectively these ideas have become known as the New Urbanism, an increasingly influential and controversial movement with its own charter, congress, and membership organization. The new urbanism is nothing less than this generation's answer to CIAM (Congrès Internationaux d'Architecture Moderne), the modernist organization and movement which dominated the fields of planning and architecture worldwide beginning in the 1930s.

The connection between traditional urbanism and new urbanism is strong. The new urbanism clearly traces its roots back to the thought and works of Camillo Sitte, Raymond Unwin, John Nolen, Werner Hegemann, Elbert Peets, and other pre-WWII figures in architecture and planning.

The movement also identifies with, and was preceded by, pioneering research on traditional urbanism by urban morphologists, typologists, urban historians, and urban designers. These individuals have contributed greatly to the revival of interest in traditional urbanism, and include Rob and Leon Krier, Aldo Rossi, Anne Vernez-Moudon, Kevin Lynch, Vincent Scully, Jr., Allan Jacobs, George Cullen, Sam Bass Warner, Robert Stern, and William Whyte to name but a few. The new urbanism has also revived interest in the works of Lewis Mumford and Jane Jacobs, both of whom decried the destruction of traditional urban forms and yet disagreed over the essential ingredients of urban life, a debate which continues amongst new urbanists with respect to the balance between civic and commercial uses.

By providing a forum for introducing and debating new urbanism concepts, the symposium's focus on traditional urbanism becomes relevant (some would say urgent) with regard to a broad array of academic and public policy areas. The advancement of new urbanist concepts for compact, mixed use, transit- and pedestrian-friendly development have found natural allies in the advocates of growth management, historic preservation, downtown redevelopment, sustainable development, environmental protection, and transit,

Speakers*

JAN. 29
- John Montague Massengale, new urbanist architect
- Robert Russell, Addlestone Professor of Architectural History at the College of Charleston

FEB. 12
- Carroll William Westfall, Frank Montana Professor of Architecture at the University of Notre Dame
- Kennedy Lawson Smith, director of the National Trust's Main Street Center

MARCH 19
- Leon Krier (invited), architect and urban design theorist
- James Howard Kunstler, author of *The Geography of Nowhere* and *Home From Nowhere*

APRIL 9
- David Brain, associate professor of sociology at New College.
- Linda N. Groat, associate professor of architecture, University of Michigan.
- Charles C. Bohl, doctoral candidate at UNC-Chapel Hill Department of City and Regional Planning, Senior Fellow with The Charles & Shirley Weiss Urban Livability Program

**Events are free to the public; there may be an admission fee for off-campus guests for the March 19 lectures.*

pedestrianism, and bicycling. New urbanists have also found natural opposition from academia -- where they are often debased as architectural determinists -- and from proponents of conventional low density, automobile-dominant, segregated land use patterns (i.e., "sprawl").

There is also a healthy divergence of opinions within the new urbanist camp over issues such as greenfield versus infill development, local vernacular architecture versus historically eclectic styles, and the potential for reconfiguring existing forms of commercial development, such as "big box" superstores. CP

***Charles C. Bohl** is Senior Fellow with The Charles & Shirley Weiss Urban Livability Program.*

***Editor's Note:** An on-line version of this article, plus schedules, a description of speakers and other relevant information can be found at:*

http://www.unc.edu/depts/dcrpweb/events/weiss.htm

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Revolving Loan Funds in North Carolina

A Profile of the Industry

Matt Hull and Carl Rist

Just beyond the gleaming corporate headquarters that herald North Carolina as one of the nation's banking centers exists a $90 million lending industry that quietly serves local markets. Without the fanfare that accompanies the corporate banking world, these revolving loan funds (RLFs) make loans to build businesses and revitalize communities in areas underserved by private financial institutions. As in most states, little is known about this industry collectively, but as a result of the research described in this article, a clearer picture of North Carolina's RLF industry has begun to emerge. For example:

- RLFs represent at least $90 million in capital dedicated to small business lending in North Carolina.
- With a median loan fund size of $1.3 million, North Carolina's funds are, on average, significantly larger than the RLFs in any other state surveyed.
- North Carolina's RLF industry has a unique structure — larger funds, but fewer of them — that is, in large part, a product of state government policy and funding.
- While a handful of high-performing funds dominate the state's RLF industry, the rest of the state's RLFs do not have a very diversified capital base and, on average, are only revolving their capital, if at all.

What is a Revolving Loan Fund?

Revolving loan funds (RLFs) are community-based financial institutions that provide access to capital for individuals and communities underserved by private financial institutions. RLFs exist in every state and are supported by funders at all levels of government, as well as by private and philanthropic institutions. They provide loans to local businesses that cannot attract private financing, and recycle the repayments by relending the capital to other businesses. RLFs are a flexible and effective tool for promoting business development, job creation, and economic self-sufficiency. RLFs have proven to be financially sustainable institutions that collectively manage up to several billion dollars in assets.

Carl Rist *is the Senior Program Manager for the Corporation for Enterprise Development (CFED).*

Matt Hull *is a program associate at CFED. He has a Master's in Regional Planning from the University of North Carolina at Chapel Hill.*

The Counting on Local Capital Project

The profile of North Carolina's RLFs in this article was developed by the Corporation for Enterprise Development (CFED) as part of a national research and policy project, *Counting on Local Capital. Counting on Local Capital*, funded by the Ford Foundation, seeks to build knowledge about the size, level of activity, and impact of RLFs. North Carolina is one of seven states profiled as part of the project, joining Arkansas, California, Illinois, Minnesota, Ohio, and Washington.

Methodology

North Carolina was selected as one of six state partners in the national Counting on Local Capital project in July 1997. The state's application was sponsored jointly by the North Carolina Department of Commerce and the North Carolina Rural Economic Development Center.

Since a single, comprehensive inventory of RLFs in North Carolina did not exist, one of the primary tasks was to develop such a list. With help from various state and non-profit sources, 88 organizations thought to be operating loan funds were identified and sent a detailed survey. From this list, 53 organizations (60%) responded. Over half of the responding organizations indicated that they did not operate a loan fund, while 24 organizations responded that they operated at least one RLF. Three of the organizations operated two separate loan funds, bringing the total number of RLFs in the study to 27.

Among the 27 RLFs in our sample, special note should be made about four of these funds. While the purpose of our survey was to identify and profile *economic development* RLFs, we received surveys from four of the larger cities in North Carolina that reported on relatively large RLFs funded primarily with Community Development Block Grant (CDBG) grants to Entitlement Cities. Each of these funds makes a combination of economic development and housing loans, but the fund managers were unable to provide data on just the economic development portion of the portfolio. Despite the fact that these differences make these four funds somewhat unlike the other funds in our profile, this report includes them in its analysis because:

- the Department of Housing and Urban Development (HUD), which funds both Small Cities CDBG grants and CDBG grants to Entitlement Cities, has been, by far, the largest source of federal dollars for RLFs, and
- data on RLFs funded with CDBG grants to Entitlement Cities, in particular, has been the most difficult to obtain during the research on RLFs for the Counting on Local Capital project.

Recognizing these differences, though, this article will at times exclude these four funds from the analysis. Thus, when reference is made to "Economic Development ONLY RLFs," this means the 23 RLFs (excluding these four distinct funds) that make economic development loans only. Otherwise, when this report refers to "All RLFs," this will indicate the entire sample of 27 RLFs from North Carolina in the database, including these four distinct funds.

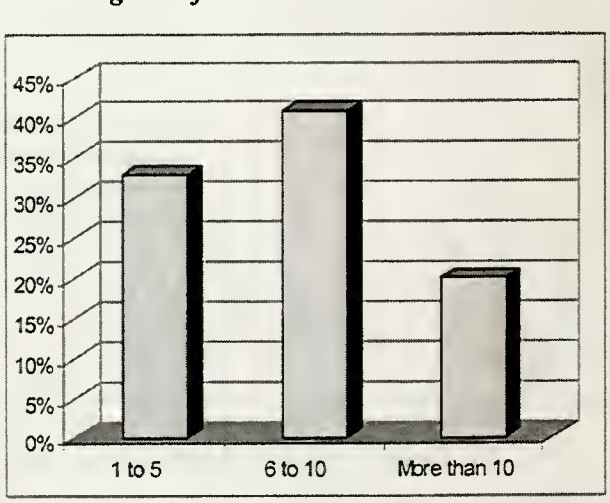
Findings from the North Carolina RLF Profile

The Basics

The organizations that operate RLFs in North Carolina are predominantly nonprofits (46 percent) and public sector organizations (42 percent). Moreover, the 27 RLFs that responded to our survey are relatively active lenders. Eighty-three percent had made a loan within the last six months.

In addition, compared to the other states studied for this project, North Carolina's RLFs are relatively more mature. The largest share of RLFs in North Carolina have been operating for 6 to 10

Chart 1. Years in operation: N.C. revolving loan funds



years. One-third of all funds began operating in the last five years; the oldest fund started lending in 1981.

Finally, the vast majority of organizations that operate RLFs in North Carolina operate a single fund (88 percent), while only 12 percent operate multiple funds. Compared to the other states studied for this project, North Carolina ranks among the states with the smallest percentage of RLFs with multiple funds.

Where the Money Comes From: Sources of RLF Capital

The 27 RLFs that responded to our survey report $90.5 million in total capital from public, private, and philanthropic sources. The total capital in the "economic development only" RLFs is almost $70 million. Based on total capital reported in its RLFs, North Carolina ranks fifth among the seven states surveyed as part of the Counting on Local Capital project.

As shown in the following chart, the federal government has been the largest source of capital for these RLFs. As indicated in the chart below, the federal government has invested more than $40 million in North Carolina RLFs, or almost 45 percent of total capital. The second largest source has been state government, with an investment of $26.937 million or almost 30 percent of total capital. The third largest source has been the private sector, which accounts for almost one quarter of total capital.

Table 1. Sources of RLF capital

Source	Amount	% of Total
Federal	$40,083,500	44.3
State	$26,937,300	29.8
Private	$20,175,000	22.3
Program Income	$2,002,300	2.2
Local	$1.281,000	1.4
Other	$80,000	0.1
Total	$99,559,100	

Federal funding

Among federal funders, the Department of Housing and Urban Development (HUD) has made the largest investment in RLFs in North Carolina. Largely through Community Development Block Grants (CDBG) made to Entitlement Cities, HUD has contributed roughly $22.5 million or 56 percent of all federal dollars in North Carolina RLFs. Other contributing federal agencies in decreasing order include the U.S. Department of Agriculture, the Economic Development Administration, the Small Business Administration, and the Appalachian Regional Commission.

It should be noted that the Small Cities CDBG program is also funded with federal dollars from HUD, but is administered at the state level. For this reason, Small Cities CDBG grants are included as part of state capital sources in the section that follows. However, if Small Cities CDBG dollars are included with federal sources, HUD's share of total capital increases to $33.9 million, or almost 38 percent of total capital in North Carolina RLFs.

State funding

The role of state government in supporting RLFs is one of the unique features of the RLF industry in North Carolina. As noted in the aforementioned chart, state government sources make up the second largest share of capital in North Carolina RLFs. With roughly equal shares coming from General Assembly appropriations and CDBG grants made through the Small Cities program, the state government has invested $26.9 million in North Carolina RLFs or almost 30 percent of total capital. Among the seven states studied in Counting on Local Capital, North Carolina ranks among the leading three states based on the share of total capital contributed from state sources.

Of particular note is the role of the General Assembly in appropriating funds to capitalize RLFs in North Carolina. Since the late 1980s, when the General Assembly appropriated funds to the North Carolina Rural Economic Development Center to establish a microenterprise demonstration, the state has directly appropriated funds to several of the state's leading RLFs as part of a comprehensive development finance strategy aimed at filling capital gaps in North Carolina.

Private sector funding

Overall, private sources of capital make up the third largest source of capital in North Carolina RLFs, accounting for approximately 22 percent of total capital. The largest source of private capital is foundations ($15.9 million or 79 percent of private sources), followed by banks ($2.6 mil-

lion or 13 percent of private sources). Among the other states studied for this project, only Arkansas has such a major foundation investment in its RLFs.

However, the distribution of private capital is highly uneven across RLFs in North Carolina. The state's largest RLF, the Self-Help Ventures Fund, which is one of the nation's leading community development financial institutions, has a total of almost $16 million in private capital or more than three quarters of all capital in North Carolina contributed by private sources.

Capital sources for the average RLF in North Carolina

The majority of the capital in the typical North Carolina RLF comes from state sources, augmented by a significant portion of federal dollars, and a smaller portion of private dollars. This is portrayed in the graph below, which excludes from analysis both the Self-Help Ventures Fund and the four large public RLFs that fund both economic development and housing.

Capitalization Structure and Trends

Size of RLFs

The size of the median RLF in North Carolina is significantly larger than in any of the other states studied for this project. Overall, the median size of RLFs in North Carolina is $1.3 million, with a range in size from $27.9 million (the Self-Help Ventures Fund) to $90,000 (Metropolitan Low-Income Housing and CDC). In fact, in no other state was the median RLF size larger than $1 million. Moreover, this finding is not distorted by the presence of a handful of larger RLFs. Even excluding the Self-Help Ventures Fund and the four RLFs that fund both housing and economic development loans, the median RLF size in North Carolina is still $1.2 million. At the same time, based on the seven state surveys conducted as part of the Counting on Local Capital project, North Carolina has a smaller total number of funds than all but one other state.

There are several key implications that follow from the larger average size of North Carolina's RLFs. First, the state's RLFs may be closer to achieving sustainability than the funds in other states. Practitioners interviewed for this project estimate that it takes a capital base of $3 to $3.5 million and an active loan portfolio of at least $2 million to generate both the revenues necessary to support the staff needed to operate a RLF professionally, and the volume of loans necessary to achieve a reasonably diversified portfolio.

Second, larger average fund size may also lead to more efficient RLF administration. For example, 83 percent of North Carolina RLFs reported making at least one loan in the past six months, a figure that is the second highest among all other states surveyed for this project.

Debt vs. equity

Overall, debt capital totals $27.7 million or 31 percent of the total capital in North Carolina RLFs. The largest source of debt capital is foundation investments, followed by federal sources and banks. Typically, foundation investments and federal loans carry highly subsidized rates and terms, making much of this debt "near equity."

As with private capital, debt financing of RLFs in North Carolina is highly uneven. Excluding the Self-Help Ventures Fund, debt capital makes up only 18 percent of total capital in North Carolina RLFs, the majority of which comes from the USDA's Intermediary Relending Program (IRP). Based on this finding there would appear to be significant opportunities for RLFs in North Carolina to use their equity capital to leverage additional debt capital.

Capital needs vs. capital availability

Despite capital resources of roughly $90 million in North Carolina's RLF industry, respondents to our survey indicated a great need for additional capital. In fact, a total of 15 RLFs in North Carolina reported a combined need of $19.3 million in additional capital, or almost 25 percent of the total capital base of RLFs in the state.

Another 19 RLFs in the state reported $11.7 million in available capital for lending. While this might appear a likely source for funds that need additional capital, this level of available funds may also represent a prudent reserve of 10-15 percent.

Where the Money Goes:

Loan products

At the median, the average loan size reported by North Carolina's RLFs was $51,500, with the loans ranging in size from $17,500 to $100,000. This average loan size[1] was the largest among all

states studied as part of Counting on Local Capital. Moreover, the median minimum loan size ($17,500) was higher than that reported in any other state. If outliers such as the Self-Help Ventures Fund and the four housing/economic development RLFs, are excluded, the average loan size and the median minimum loan size both increase to $63,250 and $20,000, respectively.[2] Interestingly, when examining average loan size based on the age of the fund, it appears that older RLFs tend to have lower average loan sizes than newer funds.

In terms of financing position, the largest share of RLFs in the state (45 percent) offer subordinated financing. Almost one-third of RLFs (30 percent) offer primary financing. Another 25 percent of funds reported "other" positions, including "gap financing" and "equal collateral." However, of the funds that offer primary financing, one-half are newer funds that have made their first loan since 1990.

RLF loan terms

The average RLF in North Carolina offers loans at an interest rate of 4.5 percent and a term of 8 years. In addition, the vast majority of RLFs (75 percent) charged fixed rates — only a small minority (7 percent) reported offering variable rates.

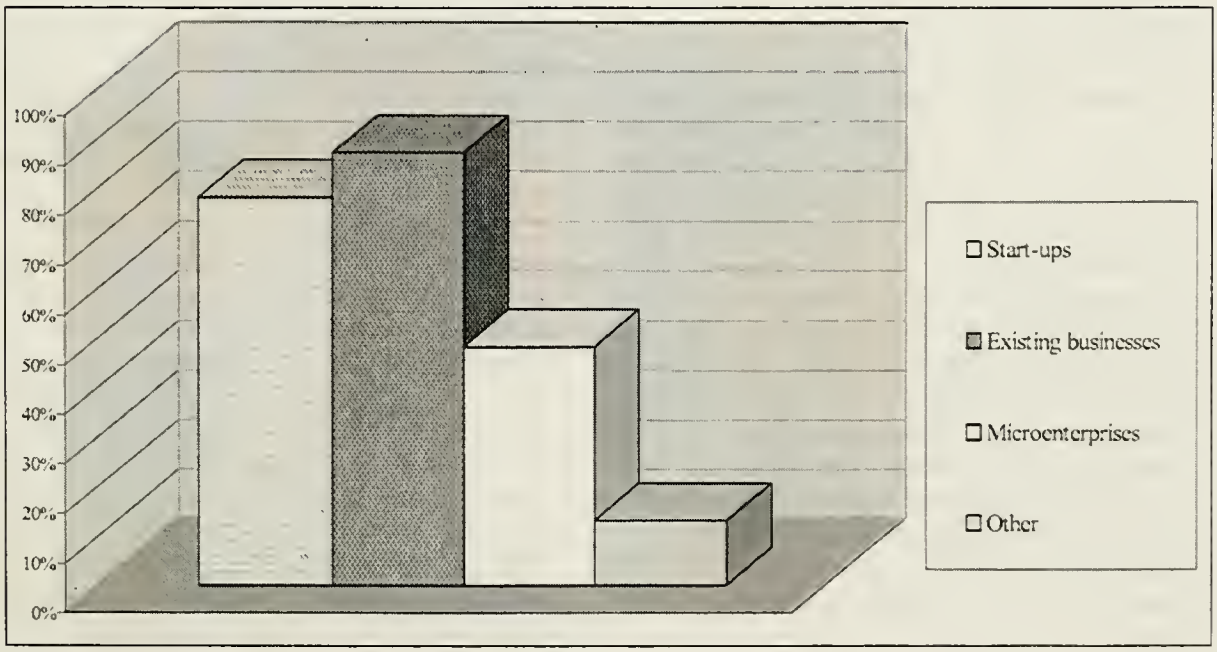
The method of establishing the interest rate varied across RLFs in North Carolina and provided some rather contradictory findings. Of the 23 RLFs that responded to a question about what kind of interest rate they charge, almost 40 percent indicated charging a subsidized rate. Twenty-five percent of respondents indicated charging a market rate. Another 37 percent of respondents reported charging a rate based on some "other" formula, typically one based on the prime rate plus a certain percentage point or some other unsubsidized rate.

If one combines these "other" responses with those charging market rates, it would appear that the majority of RLFs in North Carolina do not subsidize the interest rate charged for their loans. However, based on the responses from the eight RLFs that reported the interest rate that they charge, a median figure of 4.5 percent, it would appear that RLFs in North Carolina do charge a subsidized interest rate. Thus, the data on whether RLFs in North Carolina typically charge market or subsidized interest rates is inconclusive.

Businesses targeted

Existing businesses are the primary target of North Carolina RLFs. Of the 23 respondents (out

Chart 2. Types of businesses targeted by RLFs in North Carolina



of a total of 27 RLFs) who reported that they target particular groups of potential borrowers, the largest percentage (87 percent) indicated that they target existing businesses. At the same time, a large percentage of respondents (78 percent) also indicated that they target start-up businesses. In addition, almost half (48 percent) of the RLFs that target particular groups of borrowers report that they target microenterprises. Further, while both older and newer funds targeted start-ups and existing businesses fairly equally, newer funds tended to target microenterprises more frequently than older funds.

Additional product demand

Sixty-eight percent of the respondents indicated that the most commonly requested product not offered by North Carolina's RLFs was venture or equity capital. Despite this demand, though, there is very little activity around venture or equity capital among the state's RLFs. Only one fund that was identified, but which did not return CFED's survey, offers equity financing to borrowers. This fund, the Innovation Research Fund (IRF) of the North Carolina Technological Development Authority, is yet another example of a centrally-operating, state-initiated RLF. The second most frequently requested service not offered by North Carolina's RLFs was management training, followed by worker training.

Lending Activity and Fund Performance

Lending activity

RLFs in North Carolina manage a current portfolio of almost $46 million in loans and report cumulative lending activity of over 2000 loans worth more than $102 million. On a median capital base of $1.3 million, the average RLF has almost 20 loans outstanding worth $763,729. On a cumulative basis, the same average RLF has made 33 loans for slightly more than $1 million. From the perspective of the average fund, it appears that RLFs in North Carolina are only barely revolving their capital, if at all. However, excluding the four housing/economic development RLFs (for which there is almost no lending data), North Carolina's "economic development only" RLFs have made a total of $101,874,615 loans, cumulatively, on slightly less than $70 million in capital. This seems to indicate that some of the state's funds, particularly larger funds, are revolving their capital to a much larger extent than others.

Compared to the other states in the Counting on Local Capital project, RLFs in North Carolina appear to be relatively effective lenders. For example, among the six states that reported cumulative lending figures, RLFs in North Carolina made the third highest cumulative number of loans and the third highest cumulative dollar volume of loans. This was accomplished despite the fact that North Carolina contains a smaller total number of funds than all but one other state and that North Carolina ranks fifth among the seven states studied in terms of total capital. In addition, North Carolina RLFs reported the highest median percentage (73 percent) of current loan volume as a share of total capital.

Additional data on lending activity:

- Only 22 percent (6 out of 27) RLFs have loan loss reserves. The total accumulated in these loan loss reserves across all RLFs in North Carolina was only $1,619,841 — or slightly less than 2 percent of total capital reported.
- Credit tests on borrowers are very common. Eighty percent of respondents indicated performing some type of credit eligibility test on prospective borrowers.

Delinquencies and defaults

Because there is no standard definition of delinquencies in the RLF industry, survey respondents were first asked how they define delinquencies. Almost two-thirds of the survey respondents (63 percent) reported a definition for delinquent loans. The most common definitions of delinquency were equally split between "payments over 30 days late" (35 percent) and "payments over 60 days late" (35 percent).

In total, the 20 RLFs that reported on delinquencies reported a total of 135 delinquent loans valued at $2,523,030. Delinquency rates among individual funds ranged from 0 percent to 16.9 percent. The aggregate delinquency rate for the 15 RLFs that reported at least one delinquent loan was 4.8 percent; the aggregate delinquency rate for the 20 RLFs who reported zero or more delinquencies was 4.3 percent. These rates contrast favorably when compared with delinquency rates among small banks. For example, based on preliminary data for 1998, the percentage of past due and "non-accrual" commercial loans among banks

with $300 million in assets or less was 5.22 percent.[3]

Compared with delinquencies, information about defaults was not reported as consistently among the RLFs that responded to our survey. In fact, only 40 percent of the survey respondents (11 out of 27) could provide a definition of defaults. The most common responses ranged from 60 days past due (25 percent) to 90 days past due (16 percent) to 120 days past due (25 percent).

In total, the 14 RLFs that reported on defaults reported a total of 173 loans in default valued at $1,614,062. Default rates among individual funds ranged from 0 percent to 11.2 percent. The aggregate default rate for the 9 RLFs that reported at least one loan in default was 4.1 percent; the aggregate default rate for the 14 RLFs that reported either 0 or more loans in default was 3.5 percent.

Performance measure: Portfolio at risk

The RLFs reporting defaulted and delinquent loans provide the raw data needed to calculate one of the most important performance measures: percentage of portfolio at risk. In assessing the viability and sustainability of the RLF industry, it is essential that practitioners and funders determine the total amount of the capital that is currently at risk, either because of delinquency or default. The chart above reveals that eight to nine percent of the capital base is currently at risk. While this does not mean that all this capital will be lost, it is an important indicator for evaluating the risk of RLF portfolios and the level of loan loss reserves that are necessary to ensure that the industry's capital base is not eroded. Currently, the loan loss reserves totaling slightly less than 2 percent of total capital are inadequate to replace the capital at risk.

Technical assistance

The commitment to providing quality technical assistance services to borrowers appears relatively strong among RLFs in North Carolina. The large majority of the state's RLFs (80 percent) provide some type of training or technical assistance to borrowers. The service most commonly provided is one-on-one technical assistance (80 percent). The second most frequently offered type of service was classroom training (40 percent).

Of the 16 respondents who reported providing one-on-one technical assistance, almost two-thirds also reported providing some other type of service. This would suggest that most funds provide technical assistance, not simply as a cursory service, but rather as an essential part of their products and services. However, this is more characteristic of the newer funds, as 75 percent of those funds offering no technical assistance services made their first loan in 1985 or earlier.

RLF management and administration

RLFs in North Carolina typically rely on rather limited staff and resources to accomplish their mission. Based on information reported by 11 of 27 survey respondents, the median RLF in North Carolina has one staff person and an operating budget of $60,000 per year. This falls in the middle of the few states in the project that could provide significant data on this question.

Despite these rather limited resources, RLFs in North Carolina typically provide the range of managerial and administrative tasks common to RLFs, and by and large, do so in-house. The most common tasks provided in-house by North Carolina RLFs were loan packaging (92 percent), followed by receipt of loan payments and portfolio management (83 percent each). North Carolina RLFs use outside contractors to a lesser extent, although a significant portion contracts out for loan closings (29 percent) and liquidations (25 percent). The task most commonly *not* provided by North Carolina RLFs was underwriting (25 percent). This may be a reflection of the fact that, since a large share of North Carolina RLFs (45 percent) typically take a subordinated position on deals, lenders with the primary position are likely perform the underwriting.

The Impact of RLF Lending

The most common measure for assessing the impact of RLF lending on individuals and communities underserved by private financial institutions is to measure job creation and retention. This measure is notoriously difficult to quantify, given the inherent complexity of the job creation process and the difficulty of isolating the importance of a single factor, even one as important as capital, in such a complex process. Nonetheless, job creation remains the best proxy available to RLFs for documenting the impact of their lending on the economic condition of distressed communities or individuals. Thus, this article presents this data for

North Carolina RLFs below, along with information about the extent to which RLFs in the state target different types of communities and individuals that may lack access to capital.

Job creation and retention

The most common impact measures used by North Carolina RLFs are job creation (70 percent of survey respondents) and job retention (63 percent). Together, the RLFs who responded to the survey and could provide data on job creation and retention helped to create 5,257 jobs and retain another 5,793. By far, the leader among the state's RLFs was the Self-Help Ventures Fund, which reported helping to create 1,580 jobs and to retain 3,605, almost two-thirds of all jobs retained by RLF lending in North Carolina. In comparison, the typical RLF was focused more on job creation than retention, reporting a median of 170 jobs created and 46 jobs retained. Only a handful of North Carolina RLFs reported data on self-employment.

This median figure of 170 jobs created per RLF in North Carolina was by far the highest median job creation figure among the six states in our study that provided significant data on job creation and retention. However, one must be cautious in interpreting these figures. In addition to the difficulties with reporting job creation and retention mentioned above, it must also be noted that only 56 percent of North Carolina survey respondents actually reported data on job creation and only 44 percent on job retention. In general, there is a great need to improve the definitions and reporting methods for impact measures within the RLF industry.

Targeting strategies for RLF borrowers

The practice of targeting capital to specific groups of borrowers is essential to a strategy for reaching underserved entrepreneurs. Not surprisingly, in North Carolina almost all RLFs target their lending to potential borrowers in particular underserved groups. In fact, only two respondents (7 percent) indicated that they did not practice some kind of targeting. The group most likely to be targeted was low to moderate income borrowers (83 percent). Women and minorities (58 percent each) were also common targets of RLF lending in North Carolina.

Table 2. Borrowers targeted: (% of RLFs)

Low/Moderate income: 83%
Women: 58%
Disabled: 17%
Minorities: 58%
Youth: 4%
Other: 29%

Conclusions

This profile of North Carolina's RLF industry leads to a number of broad conclusions:

In North Carolina, RLFs are a $90 million industry. Together, on a capital base of $90.5 million, RLFs in North Carolina have made over 2000 loans worth over $102 million. As a result of this lending, these RLFs have helped to retain almost 5,800 jobs and create another 5,200.

Unlike most other states, North Carolina's RLF industry has a unique structure that is, in large part, a product of state government policy and funding. While most states have a large number of relatively small RLFs, North Carolina has a fairly small number of funds that are larger in size. With a median loan fund size of $1.3 million, North Carolina's funds are, on average, significantly larger than the RLFs in any of the other states studied for this project.

Moreover, much of the resources in these RLFs are concentrated in a few funds that operate statewide and have received significant resources from the state government. This includes the Self-Help Ventures Fund, the state's largest RLF, whose rapid growth has been aided by state government resources, including a multi-million dollar appropriation in 1995. This also includes both the Microenterprise Loan Program of the North Carolina Rural Economic Development Center and the Capital Support Loan Fund of the North Carolina Minority Support Center, each of which was initially created with a General Assembly appropriation and operates statewide through a network of local organizations. Finally, this list contains the large Community Development Block Grant (CDBG) RLF at the Department of Commerce Finance Center, which has grown rapidly as the result of a key policy decision in the early 1990s. Since 1992, all units of local gov-

ernment have been required to return all repayments from loans made to private companies using CDBG funds to the Commerce Finance Center. Previously, these repayments had been used by some local governments to create their own RLFs.

There is some evidence that the unique structure of North Carolina's RLF industry has led to greater lending efficiency. First of all, on a very basic level, almost all of RLFs in North Carolina are active. Eighty-three percent reported making at least one loan in the past six months, a figure that is the second highest among all other states surveyed as a part of this project. Second, these funds are making good use of their capital. RLFs in the state reported the highest median percentage (73 percent) of current loan volume as a share of total capital. Third, among the six states that reported cumulative lending figures, RLFs in North Carolina made the third highest cumulative number of loans and the third highest cumulative dollar volume of loans. This was accomplished despite the fact that North Carolina contains a smaller total number of funds than all but one other state and that the state ranks fifth among the seven states studied in terms of total capital.

Finally, with a larger median loan fund size ($1.3 million) than in all the other states studied for this project, North Carolina's RLFs may be closer to achieving sustainability than the funds in those other states. Practitioners estimate that it takes a capital base of $3 to $3.5 million and an active loan portfolio of at least $2 million to generate both the revenues necessary to support the staff needed to operate a RLF professionally and the volume of loans necessary to achieve a reasonably diversified portfolio.

But, has greater efficiency led to less equity? The flip side of North Carolina's RLF industry, which is characterized by relatively larger, potentially more efficient funds, is the fact that there are fewer of them. While this survey could not determine whether access to RLF capital was relatively more uneven across North Carolina compared with states that have hundreds of funds, such a finding is not inconceivable. Moreover, North Carolina's typically larger funds carry the highest average loan size ($51,500) of all the states studied. While this loan size is still not within the range typically offered by commercial lenders, does this mean that some smaller borrowers in the target markets of these funds are not being served? These are questions that call for further inquiry.

In order to continue growing, the state's RLF industry must overcome some fundamental barriers related to its unique structure. The handful of larger funds that dominate the state's industry and have been the primary beneficiary of direct state funding and policy support tend to be high-performing, have a diversified capital base, and revolve their capital. On the other hand, the rest of the funds in North Carolina's RLF industry do not have a very diversified capital base and, on average, are only barely revolving their capital, if at all.

Building North Carolina's RLF industry will require a two-pronged strategy that will require both increasing the total amount of capital in the industry and, at the same time, building the management capacity and sophistication of the average fund. RLF practitioners and state policymakers should consider a formal intermediary or industry association to carry out this strategy.

Increasing the Amount of Capital in North Carolina RLFs. The North Carolina RLF profile revealed a significant demand for additional capital. While the state's RLFs appear to be, on average, more efficient that RLFs in other states, the state's industry is relatively small, even after adjusting for population differences. Among the seven states studied for the Counting on Local Capital project, North Carolina ranked fifth in RLF dollars per capita.

One possible strategy for increasing the amount of capital in North Carolina's RLFs would be to explore the creation of mechanism to pool existing funds so that they can be used more efficiently and effectively. In order to explore this possibility, the survey asked RLFs if they would support the creation of a regional or statewide intermediary or support organization to deliver this type of service.

While the responses in North Carolina were not quite as enthusiastic as in other states, there still appears to be significant interest in such a concept. Given this interest, the state's RLF practitioners should now consider the establishment of

Table 3. Ranking of needs in survey (% of respondents ranking)

	"most important"	"second most important"
Data Collection	35%	10%
Portfolio Management	16%	11%
Asset Management	6%	0%
Policy and Advocacy	10%	5%
Capacity Building	19%	33%
Evaluation	5%	25%
Secondary Market	16%	21%

a more formal institution — whether an intermediary or a trade association — to assist the industry. With the need for additional capital far outweighing available capital among the state's RLFs, though, such an institution should focus on much more than just re-allocating existing capital. Rather, this new institution should have a broad mission that would include both increasing total capital in the state's RLFs and building the management capacity of the state's funds.

Increasing the Management Capacity in North Carolina RLF. In considering strategies for increasing the capital in North Carolina's RLFs, whether by accessing new sources of capital, such as private bank capital or secondary markets, or by utilizing new types of capital, such as debt capital, one important consideration must not be overlooked. All of these strategies will require a new level of standardization in loan underwriting and documentation procedures across RLFs in North Carolina.

For the most part, the North Carolina RLF profile revealed that the performance of the state's average fund lags behind the small cluster of industry leaders. Nevertheless, in a state with relatively few funds, these funds are critical in ensuring equitable access to RLF capital across the state.

Of course, the state's average funds are by no means unsophisticated. For example, compared with the RLFs in the other states studied for this project, North Carolina's RLF reported some of the highest levels of computer technology usage in data collection. Yet, when asked about the importance of various support services needed to improve RLF performance and impact, our survey respondents indicated a number of needs.

The need most frequently mentioned as either "most important" or "second most important" by respondents (52 percent) was capacity building. Assistance with data collection (45 percent) and secondary markets (37 percent) were also mentioned frequently by respondents as the most important or second most important need.

These findings reinforce the need for a formal mechanism — whether instituted in a trade association or intermediary — to build the management capacity of the state's funds by capturing and sharing the expertise of industry leaders in North Carolina and nationwide. CP

Endnotes

[1] Throughout this report, when reference is made to the "average loan size" of North Carolina RLFs, this refers to — more precisely — the median of the average loan size of all 27 RLFs included in this study. We use this abbreviated terminology to make the text more readable.

[2] Part of the reason for this larger minimum size of loans is that most of the state's microenterprise programs count as one RLF under the Rural Center's Microenterprise Loan Program.

[3] *FRBSF Economic Letter,* "New View of Bank Consolidation," Federal Reserve Bank of San Francisco, Number 98-23, July 24, 1988.

Manufactured Housing Zoning

Constitutional Limitations and Recent Trends

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Nearly twenty years ago Justice Brennan penned the line "if a policeman must know the Constitution, then why not a planner?"[1] Most planners have at least a passing notion of takings law and the Fifth Amendment to the United States Constitution, which prevents the taking of private property for public use without just compensation.[2] Constitutional limitations on zoning, though, can go far beyond the Fifth Amendment.

Over the past several years two Constitutional doctrines which might seem esoteric to most non-attorneys, have been used with varying degrees of success in challenging zoning ordinances which discriminate against manufactured housing, preemption and the dormant Commerce Clause. The purpose of this article is twofold: first, to explain the two doctrines and review recent federal court cases from the last three years in which they were raised and second, to briefly divine from those cases some practical advice for planners and other local government decision makers.

Constitutional Doctrines Related To Manufactured Housing Zoning Challenges

Preemption

Preemption is a federal doctrine that invalidates state and local laws that conflict or interfere with federal laws. The doctrine flows from the Supremacy Clause of Article VI of the United States Constitution, which states:

> This constitution, and the Laws of the United States which shall be made in pursuance thereof...shall be the Supreme Law of the Land; and the Judges in every State shall be bound thereby...[3]

Under the doctrine, preemption of state statutes or local ordinances occurs in one of three manners: (1) Congress may pass a statute which expressly preempts state or local law, (2) Congress, while not expressly preempting state or local law, implies that it is preempting the field by occupying the entire field of regulation so that there is no room for supplementary regulation at the state or local level, or (3) Congress neither expressly nor impliedly preempts state or local law, but state or local law neverthe less

conflicts with federal law in that compliance with both federal and state or local law would be impossible or when state or local law stands as an objective to the purpose of the federal law.[4]

Manufactured housing construction and safety standards are explicitly preempted by the National Manufactured Housing Construction and Safety Standards Act of 1974 ("the Act"):

> Whenever a Federal manufactured home construction and safety standard established under this chapter is in effect, no State or political subdivision of a State shall have any authority either to establish, or to continue in effect, with respect to any manufactured home covered, any standard regarding the construction or safety applicable to the same aspect of performance of such manufactured home which is not identical to the Federal manufactured home construction and safety standard.[5]

That is, a state or local government cannot have a building code for manufactured homes, which differs from the Federal code which implements the Act.[6] While zoning decisions are traditionally the province of state and local governments, zoning decisions regarding manufactured housing can, and have, run afoul of the preemption doctrine when those decisions are based on construction codes and the perception of safety.

Homes built in a factory to the Federal Code and transported to a home site are usually referred to as "HUD Code manufactured homes" because the U.S. Department of Housing and Urban Development is responsible for promulgation and administration of the code.[7] Factory-built homes constructed to a local construction code such as the Uniform Building Code, on the other hand, are referred to as "modular homes."

Commerce Clause

Zoning decisions regarding manufactured housing can also run afoul of the Commerce Clause of the United States Constitution. Under the Commerce Clause, "Congress shall have the Power...to regulate commerce among the several states."[8] This grant to Congress implies a related restriction preventing state and local governments from adopting certain laws that have an economically protectionist intent or effect, essentially isolating a local economy from the national economy. This is often referred to as the "dormant Commerce Clause."[9]

There are two tests used to determine whether a local ordinance violates the dormant Commerce Clause. First, if a statute ordinance discriminates against interstate commerce on its face or its effects favor in-state interests at the expense of out-of-state interests, the law will be found to violate the dormant Commerce Clause unless the discrimination is demonstrably justified by a valid factor unrelated to economic protectionism.[10] On the other hand, if the statute or ordinance operates even-handedly, is based on a legitimate governmental interest and has an "incidental impact" on interstate commerce, the regulation "will be upheld unless the burden imposed on such commerce is clearly excessive to the putative local benefit."[11] This balancing test is usually referred to as the "Pike test," so named for the Supreme Court case in which the test was first enunciated.

How might a local zoning ordinance regarding manufactured housing run afoul of the dormant Commerce Clause? The theory is actually quite simple. Manufactured homes are items of interstate commerce. They may be constructed out-of-state, or simply contain components, like fixtures or lumber, constructed or processed out-of-state. A zoning ordinance which restricts placement of a manufactured home, by implication a home built to a national building code, impedes the flow of interstate commerce in favor of local economic interests and locally site-built homes constructed to a local building code.

Courts have declined to apply the more restrictive economic protectionism Commerce Clause test to manufactured housing zoning disputes, but even under the Pike test plaintiffs have not fared all that well using the doctrine to challenge discriminatory manufactured housing ordinances. Nevertheless, the courts have spelled out some of what might be necessary for a challenge to succeed, a road map to which planners and other local government decision makers should pay heed.

Recent Court Cases

Over the past three years, federal courts from Colorado to Georgia have been confronted with

preemption and dormant Commerce Clause challenges to local manufactured housing zoning regulations, with divergent results, especially on the issue of preemption. The United States Supreme Court has made no pronouncements on the issue, so how a community may be affected depends on the area of the country in which the community is located. Viewing all the cases in context, however, including lower court decisions that may have been reversed on appeal, can provide planners and local government officials with guidelines that are sound from both a constitutional and planning perspective, guidelines which may help as they wrestle with the often thorny policy considerations that surround manufactured housing and zoning.

Not surprisingly, most of the cases come from the Southeastern United States, where the majority of manufactured homes are both constructed and sold.[12] Of most interest to North Carolina planners is the 1998 case from the U.S. District Court for the Western District, CMH Manufacturing, Inc. v. Catawba County Board of Commissioners ("Catawba County"), decided in February 1998.[13]

The case was a challenge to specific restrictions on exterior finish and roof pitch in the Catawba County zoning ordinance applicable to single section manufactured homes that otherwise met the HUD Code. The practical effect of the restrictions was to eliminate "metal on metal" single section homes from the County. Specifically, the restrictions challenged were as follows:

> Exterior Finish. The exterior siding shall consist predominantly of vinyl or aluminum lap siding (whose reflectivity does not exceed that of flat white paint), wood or hardboard comparable in composition, appearance and durability to the exterior siding commonly used in standard residential construction.
>
> Roof construction. The roof shall be designed to have a minimum rise of 2 ½ feet for each 12 feet of horizontal run and finished with a type of shingle that is commonly used in standard residential construction.[14]

The basic analysis the court used in determining whether preemption applied was whether the restrictions were construction standards preempted by the Act or appearance standards expressly permitted by the North Carolina General Statutes.[15] The court held they were appearance standards allowed by North Carolina law. In making this determination, the court looked to legislative intent of the Act and concluded that Act and the federal regulation adopted thereunder were "directed at safety, and are not concerned with regulation of the appearance or aesthetic characteristics of manufactured housing."[16] Safety-related construction standards, the court implied, dealt with housing systems explicitly mentioned in the regulations implementing the Act, items such as the plumbing, heating, and electrical systems.[17] The implementing regulations, by contract, indicated no preference, in terms of safety for a particular siding or roofing material.[18] The court did recognize that regulating location of manufactured homes for aesthetic reasons made under the guise of safety could be preempted. What would evidence this, though, would be restrictions based on specific building codes, "which by their very nature address safety concerns," as a prerequisite for siting.[19]

Catawba County also provided justification unrelated to safety, indicating it had:

> enacted the amendments to its zoning ordinance as part of a comprehensive plan to balance the interests of citizens who oppose mobile home proliferation with those of the manufactured housing industry and its customer base. The amendments establish appearance criteria...for single-wide mobile homes in order to make them appear more attractive, less likely to drive down nearby property values, and generally more palatable to the objecting public.[20]

This last justification, however, may rest on grounds shaky for other jurisdictions which try to use it. Even though courts generally accept the rationale, as did the court here, the County provided no statistical or empirical evidence that the criteria would protect property values or that "metal-on-metal" homes devalued neighboring property or drained the County's tax base,[21] an

approach that could fail if empirical data to the contrary is introduced. Moreover, while the County claimed that the criteria were a compromise to citizen pressure to ban manufactured homes altogether from large swaths to the County, the County Commissioners continued to adopt such bans after the court issued its opinion. Within weeks of the court's opinion, the Board of County Commissioners voted to ban all manufactured homes from 2,600 acres along the N.C. Highway 16 corridor near the Anderson Mountain area of the county, and banned single-section homes from another 231 acres.[22] A similarly situated jurisdiction could leave itself open to charges that the otherwise legitimate zoning decision was a pretext for an improper decision based on construction standards.

A challenge based on the dormant Commerce Clause fared no better. Using the Pike test, which both sides agreed governed the dispute, the court first found legitimate local purposes for adopting the criteria. These included the divisiveness of the issue in Catawba County, and the desire to balance opportunities for affordable home ownership with concerns for aesthetic standards and decreasing property values.[23] By contrast the plaintiffs could only point to evidence that manufacturers who had previously sold metal-on-metal homes in the County no longer could. No concrete evidence of lost sales or lost profit was shown, nor was there evidence that a certain segment of the market would be shut out from all new home opportunities. In fact, the court found that, because manufactured homes are generally sold pursuant to installment sales contracts or other long term financing arrangements, the cost to consumers of complying with the criteria could be built into the financing with only a de minimus impact on a purchaser's monthly payment.[24] Under the Pike test, the burden placed on the manufactured home industry and its consumer base was not excessive to the declared local benefit.[25]

The federal Eleventh Circuit Court of Appeals[26] reached a similar conclusion in one of the most recent cases decided, Georgia Manufactured Housing Assn. v. Spalding County ("Spalding County").[27] In reaching its conclusion, though, it had to reverse the decision of the district court.

At issue in Spalding County was a zoning ordinance that placed manufactured homes into certain categories based on ostensibly appearance-related criteria. What the ordinance defined as a "Class A" manufactured home had not only to meet the HUD Code, but had to meet other criteria including a width of greater than 16 feet, a roof pitch of 4:12 or greater (four feet of rise for twelve feet of horizontal run), roofing shingles similar to those of site-built residential construction, exterior siding similar to that of site-built residential construction and a masonry curtain wall around the base of the home. "Class B" manufactured homes also had to meet the HUD Code, but none of the other additional criteria. Class A homes were allowed by right in residential zoning districts, but Class B homes were allowed only as exceptions.[28]

The state trade association for the manufactured housing industry, along with individual manufacturers, retailers and county residents who had been denied permits brought suit against the County, attempting to invalidate the ordinance on a number of grounds, including both preemption and the dormant commerce clause. The District Court for the Northern District of Georgia, agreed that the 4:12 roof pitch requirements was both preempted by the Act and violated the dormant commerce clause.[29]

That lower court held that the roof pitch requirement conflicted with one of the stated purposes of the Act, "to improve the quality and durability of manufactured homes, " and was thus preempted. The evidence before the court showed that 4:12 roofs were inferior in both quality and durability to roofs with a lower pitch because 4:12 roofs had to be built with a hinge system in order to be transported on state highways. The 4:12 roof pitch requirement also substantially impeded manufacturers' ability to comply with other safety regulations in the HUD Code, including factory installation of the venting and combustion air systems and "wind load" requirements.[30]

The district court also held against the County on dormant commerce clause grounds. Using the Pike balancing test, the court noted that the roof pitch requirement caused significant problems to manufacturers, both inside and outside Georgia, with the potential to significantly increase costs to both members of the industry, as well as the purchasing public. By contrast, according to the court the aesthetic value and value of compatibility with site-built structures which underpinned a 4:12 roof pitch requirement was "minimal, at best."[31]

The Court of Appeals rejected both of these arguments. As to preemption, the court reviewed the Act, its legislative intent and implementing regulations to conclude that the safety standards preempted by the Act are those which protect consumers from potential hazards associated with manufactured housing. A roof pitch requirement in a zoning ordinance is an aesthetic standard having no basis in consumer protection, and thus not preempted.[32]

As to the Commerce Clause, the Court of Appeals held the lower court used the wrong findings for the Pike tests. The lower court focused on the burden on commerce generally, rather than a specific burden on interstate commerce. It is that specific burden, though, that forms the basis for any violation of the Commerce Clause.[33] The roof pitch requirement creates significant problems in the manufacturing process for both in and out-of-state manufacturers, but the requirement imposes the same burden on all manufacturers, regardless of location. Laws that impose the same burden on both in and out-of-state manufacturers usually do not violate the Commerce Clause. Moreover, the court held, price increases, in and of themselves, generally do not violate the dormant Commerce Clause. Effect on price goes to the legislative wisdom of the ordinance, not the burden on interstate commerce.[34]

The court pointed to two areas of evidence that could show the specific burden on interstate commerce: that which shows whatever housing is built in lieu of HUD-Code manufactured homes is provided by in-state suppliers, and that which shows that a 4:12 roof pitch requirement will significantly benefit the local site-built home market at the expense of the manufactured home market.[35] The plaintiffs in Spalding County failed to provide that kind of evidence to the court leading the court to find that the burden on interstate commerce, based on relevant evidence, weighed in favor of the county.[36]

The 1998 decisions in Catawba County and Spalding County followed three decisions in 1996 from federal courts in Colorado and the Fifth Circuit Court of Appeals. The district court in Colorado and the Fifth Circuit Court of Appeals split on the issue of preemption, although both ruled against manufactured housing interests on the dormant commerce clause issue.

In Colorado Manufactured Housing Association v. Board of County Commissioners of the County of Pueblo,[37] the district court held that zoning ordinances which distinguished between HUD Code manufactured homes and modular homes and prohibited HUD Code manufactured homes in the jurisdiction while permitting modular homes was preempted by the Act. In challenging the plaintiffs' preemption claims, the defendant Cities maintained that their respective ordinances dealt only with land use and not with the manner in which the homes were constructed. Further, they claimed preemption wasn't applicable because the purpose of the ordinances was to regulate community appearance and protect the tax base, not to impose safety and construction standards on manufactured homes different from the federal standards.[38] The court rejected the cities' claims. All zoning ordinances have the purpose of regulating land use, the court said. Under the cities' reasoning, an ordinance could impose strict building and safety standards for manufactured housing that clearly conflict with the HUD Code, but preemption would clearly be inapplicable because the overall "purpose" of the ordinance was regulating land use. This reasoning is incorrect. "Under the preemption doctrine, if the local and federal law conflict, the local law is invalid and must be set aside...Either there is a conflict requiring preemption, or no conflict and, thus, no preemption."[39] Ordinances which require a factory-built home to comply with a building code other than the HUD Code are in conflict with the HUD Code, resulting in preemption.

The Court, in County of Pueblo, did not address the issue of whether an ordinance that banned all factory-built homes, regardless of whether they were manufactured to the HUD Code or a local building code, from a zoning district was preempted. The Court of Appeals for the Fifth Circuit,[40] though, did reach that issue and found no preemption in Texas Manufactured Housing Association v. City of Nederland ("City of Nederland"),[41] decided only several months after County of Pueblo.

In City of Nederland, the challenged ordinance prohibited the placement of "trailer coaches" within the City limits, defining a trailer coach as "a transportable single family dwelling unit which is or may be mounted on wheels suitable for year-round occupancy and containing the

same water supply, waste disposal, and electrical conveniences as immobile housing."[42] The City had interpreted the ordinance to preclude HUD-Code manufactured homes, but not modular homes. The decision noted that unlike manufactured housing, modular housing is not built on a permanent chassis,[43] although in reality modular homes can be built on a chassis and transported in a manner similar to HUD Code manufactured homes.

The court upheld the ordinance, although the decision appears to conflict directly with an earlier manufactured home zoning preemption case, Scurlock v. City of Lynn Haven ("Scurlock"), decided by the Eleventh Circuit in 1988.[44] In Scurlock, on which the plaintiffs in City of Nederland relied, the City excluded factory built homes from certain residential districts unless they met local building codes, in essence banning HUD Code manufactured homes while permitting modular homes. The City of Nederland court distinguished Scurlock, though, because the Nederland ordinance, among other things, did not expressly link its provisions to local safety and construction standards.[45] That is, the ordinance did not on its face, distinguish between HUD Code manufactured homes and modular homes. This difference between the Nederland's ordinances and that at issue in Scurlock led the Fifth Circuit to the conclusion that what was required to show preemption was evidence and an analysis of the specific differences between the HUD Code and whatever local building code was in use.[46] In fact, much of the evidence at trial in Scurlock dealt with specific differences between the HUD Code and the Southern Standards Building Code and electrical codes with which compliance was required before the city would permit a factory-built home to be located within the particular zoning district.[47] The plaintiffs in City of Nederland provided no such evidence or analysis.

> Plaintiffs have not cited evidence that identifies the actual requirements of the local building code that HUD-code homes fail to satisfy under the ordinance This omission is fatal to plaintiff's claim that the ordinance is a thinly veiled attempt to impose local safety and construction standards on HUD-code manufactured homes. The relevant deposition testimony, taken as a whole, does not distinguish between local safety and construction standards and all other aspects of local building regulation (including the ordinance at issue in this case.)[48]

The court, in City of Nederland, also dismissed the Commerce Clause claims. The burden on interstate commerce claimed was $900,000 in lost sales over a three-year period, but this was not the type of evidence sufficient to show a burden for Commerce Clause purposes. The City's ordinance treated in-state producers of manufactured homes equally to out-of-state firms. The Commerce Clause, through, protects interstate markets, not particular interstate firms. For evidence of lost manufactured housing sales to be relevant, the plaintiffs would have to show that the housing built in-lieu of HUD Code was and will be provided by in-state producers. In short, not only did plaintiffs have to show $900,000 in lost sales, but that any homes sales which replaced those lost to HUD Code manufactured homes would be provided by in-state producers. The plaintiffs did not provide this evidence.[49]

The benefit given by the City was protection of property values and at least one appraisal provided by the City stated that the presence of HUD Code manufactured homes in a residential neighborhood of conventional site-built homes had a negative impact on property values. The plaintiffs claimed that "numerous studies" concluded that property values are not diminished by the presence of adjacent HUD Code manufactured homes, but did not provide these studies to the court. This left the court with no alternative but to find in favor of the City and uphold the lower court's ruling that there was no genuine issue as to whether any burden the ordinance may impose on interstate commerce is clearly excessive to the local benefits..."[50]

The Court, in County of Pueblo, left the Commerce Clause issue for trial, but the eventual outcome, decided after City of Nederland, was identical.[51] In fact, the district court relied heavily on the City of Nederland analysis in eventually rejecting the Commerce Clause challenge.[52]

Guidelines for Planners and other Decision Makers

What does the sum total of these recent cases mean for manufactured home zoning? On the whole, the cases appear to conflict on the issue of preemption, and manufactured home proponents have been frustrated in their attempts to attack discriminatory ordinances on dormant Commerce Clause grounds. Nevertheless, even though use of the two doctrines have lost some of their luster, especially challenges based on the Commerce Clause, they retain some vitality and these recent cases provide some broad direction for planners and other decision makers.

An ordinance which explicitly distinguishes between HUD Code manufactured homes and homes built to the local building code, whether factory-built or site-built, are suspect if HUD Code manufactured homes are prohibited entirely from a particular jurisdiction or zoning district, City of Nederland notwithstanding.[53] Not only is the construction code the only inherent difference between HUD Code manufactured homes and any home built to a local building code, but attempting to ban modular homes puts a jurisdiction in the unenviable position of having to defend distinguishing between a site-built home and a factory-built home constructed to the same code. A zoning ordinance which distinguishes between HUD Code manufactured homes and homes built to local building codes based on anything other than exterior appearance, such as plumbing hook-ups, will also be suspect.

Appearance based regulations are more likely to pass muster if there is a legitimate and expressed policy rationale to form a basis for the restriction, preferably expressed prior to adopting the restrictions. A part of what saved the ordinance in Spalding County was the existence of language in its comprehensive plan dealing with aesthetic incompatibility. While the Spalding County comprehensive plan wasn't adopted until several months after the ordinance, that approach could leave a jurisdiction open to charges that concerns over aesthetic compatibility or property values are simply a pretext for regulation based on construction standards.

As cases like Catawba County and Spalding County imply, statistical or empirical data is not generally necessary for a local jurisdiction to justify legislative decisions like zoning. Such evidence might go to the wisdom of the legislation, but not the legality. When faced with data showing no impact of HUD Code manufactured homes on adjacent residential property values, though, the lack of any empirical data to support zoning which discriminates against HUD Code manufactured homes leaves local governments vulnerable to charges that the challenged ordinance is simply a pretext for regulation based on construction standards, and has no relationship to actually protecting property values. While no empirical data seems to have been introduced in these recent cases, academic studies indicating little or no impact of HUD Code manufactured housing are beginning to emerge.[54]

Few legislative decisions over residential zoning engender debate as heated as that over manufactured housing, touching on issues as complex as class and community values.

Few legislative decisions over residential zoning engender debate as heated as that over manufactured housing, touching on issues as complex as class and community values. City councilpersons and county commissioners faced with heated debate over their legislative decision are too often confronted by threats of legal action. Legal theories used to limit legislative discrimination against HUD Code manufactured homes, though, cannot be discarded as the knee-jerk reactions of those on the losing side of the zoning decision. The two constitutional limitations addressed here, preemption and the dormant Commerce Clause, have some vitality, albeit a vitality limited in effectiveness over the past few years. Local ordinances should address the issues these doctrines raise as a way of keeping the legislative decision making out of the hands of the courts. CP

Endnotes

[1] San Diego Gas & Electric Co. v. San Diego, 450 U.S. 621, 661 n.26, 101 S.Ct. 1287, 67 L.Ed2d 551 (Brennan, J., dissenting).

[2] No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.
U.S. Const. Amend. V.

[3] U.S. Const. Art. VI, § 2.

[4] R.J. Reynolds Tobacco Co. v. Durham County, 479 U.S. 130, 107 S.Ct. 499, 93 L.Ed.2d 449 (1986).

[5] 42 U.S.C. § 5403(d)

[6] Federal regulations implementing the Act also contain explicit preemption language. See 24 C.F.R. § 3282.11.

[7] 24 C.F.R. § 3282.1.

[8] U.S. Const. Art. I, § 8, cl. 3.

[9] GSW, Inc. v. Long County, 999 F.2d 1508 (11th Cir. 1993); Oregon Waste Systems, Inc. v. Dept. of Environmental Quality, 511 U.S. 93, 114 S.Ct. 1345, 128 L.Ed.2d 13 (1994).

[10] Fort Gratiot Landfill v. Michigan Dept. of Natural Resources, 504 U.S. 353, 12 S.Ct. 2019, 119 L.Ed.2d 139 (1992).

[11] Pike v. Bruce Church, Inc., 397 U.S. 137, 90 S.Ct. 844, 25 L.Ed.2d 174 (1970).

[12] In January 1998, for example, nine of the ten top HUD Code manufactured home producing states were in the southern United States. The top five alone - Texas, North Carolina, Georgia, Florida and South Carolina - had a market share of 42.4% of the 26,362 homes shipped that month. Statistically Speaking, North Carolina Manufactured Housing News, April 1998, at 14.

[13] CMH Manufacturing, Inc. v. Catawba County Board of Commissioners, 994 F.Supp. 697 (W.D.N.C. 1998). The Western District comprises the counties of Alexander, Alleghany, Anson, Ashe, Avery, Buncombe, Burke, Caldwell, Catawba, Cherokee, Clay, Cleveland, Gaston, Graham, Haywood, Henderson, Iredell, Jackson, Lincoln, McDowell, Macon, Madison, Mecklenburg, Mitchell, Polk, Rutherford, Swain, Transylvania, Union, Watauga, Wilkes, and Yancey. 28 U.S.C. § 113.

[14] Catawba County, 994 F.Supp. at 700.

[15] N.C. Gen. Stat. §§ 160A-383.1, 153A-341.1

[16] Catawba County, 994 F.Supp. at 706.

[17] Id. at 705.

[18] Id. at 708.

[19] Id. at 707.

[20] Id.

[21] Id. at 702.

[22] Executive Director's Report, North Carolina Manufactured Housing News, April 1998, at p. 4.

[23] Catawba County, 994 F.Supp. at 709.

[24] Id. at 710.

[25] Id.

[26] The Eleventh Circuit includes the states of Alabama, Georgia and Florida. 28 U.S.C. § 41.

[27] Georgia Manufactured Housing Assn. v. Spalding County 148 F.3d 1304 (11th Cir. 1998)

[28] Id. at 1306.

[29] Georgia Manufactured Housing Assn. v. Spalding County, No. 3:94-cv-51 GET, 1996 U.S. Dist. LEXIS 21855 (N.D.Ga. June 13, 1996), reversed, 148 F.3d 1304 (11th Cir. 1998).

[30] Id. at *21.

[31] Id. at *26.

[32] The court looked to language in the County's comprehensive plan regarding aesthetic and land use compatibility as evidence that the roof pitch requirement was intended as an aesthetic regulation. Spalding County, 148 F.3d at 1310, n.9.

[33] Id. at 1308.

[34] Id.

[35] Id.

[36] Id.

[37] Colorado Manufactured Housing Association v. Board of County Commissioners of the County of Pueblo, 946 F.Supp. 1539 (D.Colo. 1996).

[38] Id. at 1548.

[39] Id. at 1551, n.9.

[40] The Fifth Circuit covers the states of Texas, Louisiana and Mississippi. 28 U.S.C. § 41.

[41] Texas Manufactured Housing Association v. City of Nederland, 101 F.3d 1095 (5th Cir. 1996).

[42] Id. at 1098.

[43] Id. at 1099.

[44] Scurlock v. City of Lynn Haven, 858 F.2d 1521 (11th Cir. 1988).

[45] City of Nederland, 101 F.3d at 1095.

[46] Id.

[47] Scurlock, 858 F.2d at 1523.

[48] City of Nederland, 101 F.3d at 1095. In addition to affirming the district court's decision (Cite to lower court), City of Nederland also validated another federal preemption case arising in Texas, Texas Manufactured Housing Association v. City of La Porte, 974 F.Supp. 602 (S.D. Tex. 1996). The city in that case focused on the perception of mobility and transportability of a HUD Code manufactured home and the perceived effect on property values as the basis for excluding HUD Code manufactured homes. Id. at 606-07.

[49] Id. at 1104.

[50] Ibid.

[51] Colorado Manufactured Housing Assn. v. City of Salida, 977 F.Supp. 1080 (D.Colo. 1997).

[52] Id. at 1087-88.

[53] Additionally, by state statute, cities and counties in North Carolina "may not adopt or enforce zoning regulations or other provisions which have the effect of excluding manufactured homes from the entire zoning jurisdiction." N.C. Gen. Stat. § 160A-383.1(c).

[54] See, e.g., Katherine Warner and Robert Johnson, Manufactured Housing Impacts on Adjacent Property Values (University of Michigan, January 1993); Guoqiang Shen and Richard A. Stephenson, The Impact of Manufactured Housing on Adjacent Site-Built Residential Properties in North Carolina (East Carolina University 1998). The East Carolina University study examined the impact in Carteret County, Henderson County, Pitt County and Wake County.

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Carolina Planning

Making the Land Use – Water Quality Connection

An Assessment of Land Use and Water Resource Planning in North Carolina

Sara Hinkley and Edward J. Kaiser

In the summer of 1998, the N.C. Division of Community Assistance funded a study by the authors to examine the state of water quality planning in North Carolina. The study included a survey and evaluation of comprehensive/land use plans across the state. This article addresses the findings from the survey and evaluations, and proposes guidelines for effective land use and water resource planning.

From the study we conclude North Carolina communities are not yet addressing water quality in their comprehensive plans for future urban growth. The local administrators we surveyed say water quality issues are important – particularly the protection of public water supplies – but the plans we evaluated do not reflect the magnitude of this concern. The plans, most notably, fail to recognize the connection between land use and water resource planning, evidenced by their general inattention to water quality issues and development suitability analyses.

Part of the problem lies in the uneven quality of planning itself. For example, we found that inadequate attention to the planning information base tended to cut across all subjects, not just water resource issues. A small minority of communities have separate documents addressing water resources, such as public water or sewer service area extension plans and stormwater management ordinances. But the existence of such documents does not remedy the failure of comprehensiveness. The connections between land use and water quality must be addressed in a comprehensive land use, environmental, and infrastructure planning process. The failure to draw those connections adequately will ultimately handicap any policies or programs intended to address water quality.

Methodology

The study included a survey of local administrators in every municipality and county in the state. We received survey responses from 99 of the state's

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100 counties, 47 municipalities with populations over 10,000, and 283 municipalities with fewer than 10,000 people.[1] The study also involved an evaluation of plans from 44 counties, 22 cities with populations over 10,000, and 32 cities with fewer than 10,000 people.

The survey asked administrators about the importance of particular water quality issues to the community. The survey also asked whether the community had a comprehensive or land use plan, and ordinances relevant to water quality. (See Figure 1 for the list of survey questions.)

The plan evaluation instrument addressed both quality and scope of content in the 98 plans surveyed. The instrument reflects our conviction that land use and water quality are inextricably related, and that water resources can be adequately protected only by inclusion in good comprehensive land use planning. We divided the evaluation into five elements: participation, values, information base, policies, and implementation. We recorded inclusion or omission of particular issues in plan component, and evaluated the quality of the treatment of some plan elements. (See Figure 2 for an outline of the evaluation instrument.)

Survey of Communities

Our survey revealed that the overwhelming majority of local administrators believe protection of public water supplies is the most important water resource issue faced by their community. We asked local officials to rate a list of 17 possible water quality issues as "very important," "somewhat important," or "not important." Table 1 lists the issues most often listed as "very important." Some 85 percent of North Carolina counties and municipalities listed protection of public water supplies as a "very important" issue; and the proportion goes over 90 percent for cities. The plan evaluations revealed a similar emphasis – the strategy and value evidenced in the largest number of plans was "urban growth and demand for water supply."

Perhaps most notable is the number of issues ranked as very important by a significant share of respondents. At least half of local officials rated the following as "very important:" expanding wastewater collection/treatment capacity (56 percent); protection/improvement of stream corridors (54 percent for all places, but 61 percent in the CAMA region); and stormwater runoff (51 percent for all places, but 66 percent in the CAMA region and 61 percent of cities).

Table 1. Top 5 issues rated "very important" (ranked by percentage)

CAMA Region

1. Protection of public water supplies (83)
2. Stormwater runoff (66)
3. Preservation/improvement of stream corridor (61)
4. Expanding wastewater collection-treatment capacity (56)
5. Failing septic tanks (56)

All Regions

1. Protection of public water supplies (85)
2. Expanding wastewater collection-treatment capacity (56)
3. Preservation/improvement of stream corridor (54)
4. Stormwater runoff (51)
5. Erosion and sedimentation (48)

There is some variation in response by region and type of government. Generally, counties and towns placed higher importance on failing septic tanks, agriculture runoff, protection of shellfish/fish habitats, and landfills. Cities were more concerned with stormwater runoff, floodplain management, small wastewater treatment plants, and brownfields than were towns and counties.

Different areas of the state also have varying concerns. Erosion and sedimentation were considered very important to 61 percent of mountain communities (compared to 48 percent of all places). Governments in the region affected by the N.C. Coastal Area Management Act (CAMA) answered "very important" more than other governments for almost all water quality issues, and significantly more in particular for protection of habitats and failing septic tanks. When asked, "what is the *most* important water quality issue?", half of the communities cite protection of public water supplies. The proportion was fairly constant over all types of jurisdictions and regions of the state. Wastewater collection was the most important water quality issue for 17 percent of

Figure 1. Sample of survey questions

- Does your area have a plan which specifies the desired land use pattern or development policies for your jurisdiction?
- Does the plan specifically account for any state designated stream classifications?
- Has the land use plan significantly influenced any water quality policy debates in the last five years?
- Was the location for the most recent wastewater treatment plant selected before or after the current plan was written? If after, was selection of the site influenced by the current plan?
- Is any part of your jurisdiction serviced by a separate water related utility?
- Does your area have: Natural Hazard Mitigation plan, capital improvement program or plan, public water service area extension plan, public sewer service area extension plan, zoning ordinance, subdivision control ordinance, flood damage prevention ordinance, stormwater management ordinance?

Figure 2. Summary of plan evaluation

1. **Participation:** Forms of public participation mentioned
- Explanation of plan making process
- Explanation of planning, the plan's purpose, or mission statement

2. **Values:** Predominant values in plan
- Method used to express values (e.g. explicit or implicit, in one place or dispersed)
- What goal drives the water quality focus of the plan

3. **Data Collection & Analysis:** (elements scored from 0-2)
- *General elements:* population, economy, existing land uses, etc.
- *Land/Environmental:* soil/geology; topography; land cover; habitats; etc.
- *Water:* water supply surface water; groundwater; sedimentation; etc.
- *Other:* air quality; solid waste disposal; development suitability; etc.
- *Demand/Capacity Analysis:* future land/wastewater treatment/water demand; etc.
- *Existing policies:* state, federal, local policies and/or requirements

4. **Intended Policies** (elements scored 1 if referenced, included, or proposed, 0 if not)
- *Policies characteristics:* are policies specific or general, incorporate extra-local strategies
- *Characterization:* verbal policies, land use designation, small area plans, land classification system
- *Regulations:* density bonuses, impact fees, urban growth boundary, etc.
- *Intergovernmental:* mechanisms for intergovernmental coordination regarding development, water quality, or wastewater treatment
- *Plan extensions:* e.g. water supply plan, watershed management plan, small area plan, capital improvement plan

5. **Water Quality Policies** (same as above)
- *Water quality issues addressed:* e.g. sewer service area, agricultural runoff, wetlands
- *Water quality tools:* e.g. riparian buffers, water conservation, critical areas
- *Characterization of policies:* characterize values driving water quality strategies

6. **Overall Quality Rating:**
- Implementation
- Monitoring and evaluation
- Water quality
- Development management mindset (e.g. growth accommodating)
- Complete plan

places, a concern that was also fairly constant among all local governments. Next in order of priority were stormwater management and failing septic tanks, though stormwater runoff is the second most cited issue for larger municipalities. Cities exhibited less variation in the issues considered "most important." Ninety-three percent cited one of four issues: protection of public water supplies, expanding wastewater collection/treatment capacity, stormwater runoff, or defining water and sewer areas.

Just over half of all the survey respondents have a land use or comprehensive plan. That figure varied widely by type of government: 91 percent of cities had plans, compared to only 39 percent of towns and 71 percent of counties. The vast majority – 85 percent - of all plans have been formally adopted. Of the remainder, half have been "formally accepted."

Plan Evaluation

We found some indications that comprehensive plans are not following general guidelines for good planning (e.g. those outlined by Kaiser, Godschalk and Chapin in *Urban Land Use Planning* and the *Growing Smart* guidelines published by the American Planning Association). Only a slight majority of plans made connections between goals, objectives, and policies, and only 20 percent prioritized their proposals or strategies. Most plans also lacked evaluation mechanisms or criteria. The evaluation results for three sections, values, information base, and policies are discussed below.

Plan section: Values

The values section of a comprehensive plan provides the goals and objectives that will drive the community's growth management strategies and policies. The authors determined that most plans based their approach on a narrow scope of values. A majority of the plans' values sections recognize the importance of accommodating expanded need for water management systems: 60 percent value growth and demand for wastewater treatment, and 63 percent value growth and demand for water supply. An underlying assumption behind these values seems to be that water is a managed flow for basic domestic needs. Few communities address water as an economic resource for commercial or tourist uses (only 32 percent), or as a natural resource with non-commercial value (also 32 percent).

County governments value water quality matters more than city and town governments, the evaluation results suggest. For example, 42 percent of county governments value water as an economic resource to be protected, while only 17 percent of cities and 25 percent of towns have this perspective. A higher percentage of county plans also emphasize the protection of water as a natural resource – 36 percent – than city (26 percent) and town (31 percent). County plans more often value protection of the public water supply (62 percent, versus 55 percent city and 43 percent town). County and town plans are about equally likely to address growth and demand for wastewater treatment systems (67 percent) and more likely than cities (54 percent). Cities are the most likely jurisdictions to address growth in the demand for water supply (83 percent, versus 74 percent county and 81 percent town). These differences in value orientation may reflect the variation in current capacities: cities are more likely to have large treatment facilities, whereas a growing town or urbanizing county is more likely to be facing the transition from septic systems to treatment plants.

Plan values also varied significantly region to region. As expected, protection of water as an economic resource and natural habitat was more often cited in CAMA communities. Failing wastewater treatment or septic tanks was cited more often for counties than municipalities, and for CAMA more often than non-CAMA communities (again, this may reflect the larger reliance on septic systems by counties and CAMA communities). Growth and demand for wastewater treatment (60 percent overall) were cited for 70 percent of cities, and nearly 70 percent for the fast-growing Piedmont region communities (compared to around 50 percent for other regions). Growth and demand for water supply followed a similar pattern. Protection or enhancement of drinking water quality was identified as a driving value in less than 50 percent of the plans (interesting given the overwhelming prioritization of protection of public water supply by survey respondents). Finally, "meeting state requirements" was cited as the primary value for nearly 70 percent of CAMA plans, compared to 45 percent of all plans, and 68 percent of town plans (See Table 2).

Table 2. Values driving water-related focus of the plan's values and policies sections.

Value	Percent of values sections	Percent of policies sections
Growth and demand for water supply	63	78
Growth and demand for wastewater treatment	60	64
Meeting state requirements	45	47
Protection or enhancement of drinking water quality	40	45
Protection of economic resource	32	35
Protecting water as a natural resource (non-commercial value)	32	37
Protection of aquatic environment (habitat)	24	31
Failing wastewater treatment system	21	26
Protecting water quality for other communities	7	8

Plan section: Information base

Our evaluation of the information base of plans revealed the greatest shortcomings, and gave us some insight into the reason for overall mediocre quality of the plans. The creation of an adequate information base is perhaps the most expensive and time-consuming aspect of plan-making, but it is vital because it affects the quality of the elements that follow. We were particularly dismayed to find a very weak synthesis of those information elements that were included. For example, land suitability analyses were rarely included and few plans adequately treated the relationship among data elements. In most communities, the information base appears to function more as a reflexive preparatory step to policy-making, rather than as a significant part of the policy-making exercise.

Fewer than half of the plans anticipate future water use demand or future wastewater treatment demands.

The elements that communities included in their planning information base reflect their general values as described above. Over 80 percent of the plans provide adequate discussion of water supply systems and wastewater management, and roughly a quarter of those plans include relatively sophisticated discussion of these issues. However, fewer than half of the plans include projections of future water use or water treatment demands. The plans also include little information about natural water systems, including wetlands, groundwater, and non-water supply surface bodies. The plans' information bases are particularly deficient regarding the sources of hazardous materials, sedimentation, erodable soils, and the effect of agriculture on wetlands. Plans rarely include information on topography and land cover. Development suitability analysis, identification of critical areas, future water and wastewater demand, and even land development projections are included in only about half the plans, and are rarely mapped.

We also compared each plan to a list of water-related information elements, including both natural resource water issues and issues directly related to public water supply. Water supply from surface water, the most commonly included information, is addressed by fewer than 50 percent of the plans. CAMA plans are significantly more likely than non-CAMA plans to include water-related information, particularly natural hazards (92 percent compared to 40 percent non-CAMA), wetlands (78 percent to 24 percent), water quality conditions (58 percent to 26 percent), and agricultural impacts (27 percent to 8 percent).

We were particularly dismayed by the inadequate attention to capacity and suitability analysis. Demand and capacity analysis is needed to provide a consistent set of projections for planning efforts and to ensure that future development patterns do not jeopardize the quality of water supply or other water resource. Just under half of the plans included projections of future land use, water use, or wastewater treatment demands. Fewer than half (46 percent) identified land control areas (i.e. annexation or expansion of extraterritorial

jurisdiction). Land development trends and projections were more commonly analyzed; 60 percent of plans included them, and a third of those plans received high scores for the treatment of the element.

Plan section: Intended policies

The policy sections of most plans consist of general policy statements, rather than specific, measurable actions. Plans are particularly unlikely to include spatially-explicit policies. We characterized each plan as a land use design, development management, and/or land classification plan (plans could be marked as multiple types). 81 percent of plans include verbal statements or actions (sometimes without explicit spatial designations). Just over half of the plans include clusters of policies associated with explicit spatial districts (such as "urban transition districts" or "conservation districts"). Land use designs (for either an entire jurisdiction or small areas within a jurisdiction) are included in just over a third of plans. Those land use plans only occasionally designated areas for future expansion of water and sewer services, or annexation.

Inclusion of water-related strategies

The most notable finding of our study was the difference between the number of communities placing a high priority on public water supply (83 percent) and the number of communities who addressed protection of the public water supply in their policies (barely 50 percent). Fifty-nine percent include provisions for a sewer service area, and 41 percent address on-site wastewater treatment. Policies regarding natural water processes and human impact on these systems are even less common. About a third of the plans specify some sort of wetlands protection, storm water management or sedimentation and erosion prevention. The plans are even less assertive in addressing human pollutants to water systems. Less than 20 percent feature provisions to mitigate agricultural runoff or hazardous materials.

Relatively few plans include development management tools that specifically address water quality. Best management practices (both urban and rural), storm water detention systems, and storm water detention systems are each included in only 20 percent of plans. Critical area or overlay district designation is used by 35 percent of plans, in large part because CAMA communities are required to use it; the designation is rarely used by non-CAMA communities. Plans more commonly use typical development management tools: zoning or subdivision ordinances (84 percent), infrastructure, provision of services and capital improvements to manage growth (55 percent), control of the type and mix and density of land use (50 percent), and control of structural and site design (48 percent). Particularly in larger communities, water quality issues may be addressed in a separate water resource plan, and some growth management tools may be included in single-issue plans (particularly capital improvement plans). We found that although many communities do have plans in addition to a comprehensive plan, water-related plans are the least common plan extensions. While transportation plans were referenced or proposed in 75 percent of community plans and capital improvement plans in 45 percent; water supply plans were proposed in only 43 percent; open space, recreation, or greenway plans in 40 percent; storm water management plans in 27 percent; watershed management plans in 31 percent; and wastewater treatment plans in 34 percent. The survey questionnaire produced similar results: 35 percent of respondents said they have a capital improvements plan, but fewer than a quarter have public water or sewer service area extension plans. Nearly half have a flood damage prevention ordinance but only 15 percent have a storm water management ordinance.

Are the plans influencing, or influenced by, water quality decisions?

One measure of the quality of a plan's treatment of water resource issues is whether the plan has already been useful in addressing such issues. We asked local administrators to indicate the relationship, if any, between their comprehensive plan and the siting of a wastewater treatment plant. The plan significantly affected the location of the wastewater treatment plant in only 15 percent (4 of 26 communities) of those communities where their current plans were written prior to the location of the wastewater treatment plants. Conversely, the location of the wastewater treatment plants significantly influenced the land use plans in only 20 percent (22 out of 112 communities) of those communities where the wastewater treat-

ment plants were in place when the current plans were written. The percentage is even lower for mountain jurisdictions and for communities under 10,000. Only 17 percent of local jurisdictions with land use plans claim that the plans significantly influenced any water quality policy debates in the last five years. One reason for this lack of connection may be the quality of the plans; most plans we reviewed could not in practice provide guidance for resolving a water quality decision.

Guidelines: Ways to better address water resource issues in land use plans

Good water resource protection can only be accomplished in conjunction with good land use planning. In order to protect water quality, communities must have a land use and water resource plan that work together, although they may be separate documents or included as separate elements in a comprehensive plan. Both the land use plan and the water resource plan must recognize the fundamental reciprocity of the relationship between land use and water resources. The future land use plan must incorporate the technology, economics, and natural processes that govern water resource planning. Similarly, water resource plans must be consistent with proposed future land use patterns. Elements of the plans must be designed in consideration of each other. In addition, they must be developed jointly, each part consistent with and reinforcing the other.

Three elements are critical to the development of this connection.

1. Both land use and water resource plans should be based on a common, consistent, and persuasive set of facts and assumptions. Most importantly, the demand estimates for land and location that drive the land use plan should be based on the same population and economic forecasts as the demand estimates for water and wastewater treatment used in water resource plans. (In that way, both the land use and water resource planning will share the basic assumption about future size and shape of the community to be accommodated.) Similarly, planning should be based on a thorough baseline of information about carrying capacity of the area and potential environmental threats.

2. The two plans should have compatible future spatial designs. For that to happen, the distribution of future land uses and densities should be analyzed and summarized by existing and proposed water and sewer service areas, as well as by sensitive environmental areas such as watersheds, flood plains, and wetlands. That is, the plan should estimate the future intended population, employment, and water/sewer-sensitive land uses (which represent demand for water and sewer services) not just for the entire jurisdiction but by each separate water and sewer service area. Similarly, high risk impacts should be summarized by sensitive environmental areas.

3. The land use plan should use land suitability maps in exploring options for the future land use pattern of a community. These maps represent assessments of the variation in suitability of areas for future urban development, as well as agricultural and natural resource uses and ecological processes. Those analyses and explorations should include the feasibility and economy of extending water and sewer infrastructure, as well as the usual assessments of accessibility and physical features of the land. In that way, proposed future land use designs can incorporate infrastructure design principles and thus reflect responsible infrastructure planning including water and sewer infrastructure. The suitability analysis should also reflect relative vulnerability of environmental features and processes to land use changes and thus promote environmentally responsible land use designs, as well as water and sewer planning.

The following sections provide further guidance for each element of the community plan.

Information for good planning

The information base, in addition to including specific and consistent assumptions about future population and economic growth, should be informed by studies of existing land use, including classifications based on the impact of the use on water resources. For example, uses might be classified as high risk, medium risk, and low risk to water quality. Land supply should not only be assessed for its market-oriented suitability (i.e., assessing factors that affect the costs of development and consumer preferences about locations), but also for the vulnerability of development to environmental hazards at that location, the vulnerability of environmental systems to development at that location, and the reasonableness of extension of infrastructure.

To conduct the appropriate suitability studies, it is necessary to construct data inventories for at least three categories of natural resources:

- Natural resources to be respected (e.g., state-designated streams and watersheds, groundwater recharge areas, wetlands, and other areas of environmental concern);
- Land characteristics affecting suitability for development and potential of development to cause environmental degradation (e.g., steep slopes, erodable soils); and
- Cultural and historic sites.

In addition to the studies of land use, land supply, and environmental resources, the information base should examine the existing community facilities with special attention to public water supply systems, wastewater management systems, and storm water and flood plain management facilities and policies. These studies should map and inventory the conditions and capacities of existing facilities and proposed changes in those systems; including existing and planned service area boundaries. For larger water supply systems, the inventory should include sources of supply, treatment works, storage facilities, and distribution networks. Where groundwater is used for public water supply sources, the plan should include an assessment of groundwater quality and map the locations of well-heads and well-head protection areas. Any necessary new water supply watersheds should be addressed and delineated. The inventory of wastewater management systems should be equally detailed, with special attention to parts of the system with inadequate capacity and where there are known overflows, bypasses, and threats to public health, including problems in unsewered areas.

The information base should include studies of existing water resource policies, including their geographic boundaries, implications for future land use change, implementation issues, and government capabilities (administrative, financial, legal) to modify and extend its development and environmental management programs. State and federal policies or plans with implications for local development, and their relationship to local policy, should be described. For example, state water quality classifications for segments of streams and lakes should be identified, with related assessments of how well those segments support their designated uses.

Goals, objectives, and priorities

The values section should include both goals - ideal future conditions to which the community aspires - and objectives - which are measurable intermediate achievements leading to progress on goals. Objectives also serve as benchmarks in the monitoring component of the plan (See Figures 3 and 4.)

The values component of the plan should incorporate natural resource goals explicitly, including goals and standards mandated by state and federal policy which the local government is legally or politically bound to implement. For example, state programs such as the water supply watershed classifications include both explicit and implicit water quality protection goals, which should be included in the community's plan. They also include the community's judgments about levels of water and sewer services required and environmental qualities which are valued. These judgments and values will determine infrastructure capacity needs and environmental protection programs.

Intended policies

The proposed policies and programs of the plan should incorporate land-oriented policies, general policies about environmentally sensitive land use patterns and development practices, as well as policy maps of intended service areas, environmentally sensitive areas, and non-urban use areas. Beyond that level of policy, the land use plan can incorporate water and sewer plans and particular environmental protection plans (e.g., a watershed land management plan) by reference or by summarizing them within the land use plan. Ideally, plans should utilize both the land use and land classification formats to indicate the future land development pattern. As described at the beginning of this section, the plans should be developed in conjunction with water resource planning for the community.

A land classification plan should delineate those areas of the planning jurisdiction where development should not occur, such as environmental-conservation areas, areas to be preserved for agriculture, or lands suitable for development only in the long-term. Policies for these areas should be combined in the land classification plan with areas designated environmentally-sensitive

Figure 3. Orange County Comprehensive Plan

This plan's strong information base included information like the following:

Water resources

Watersheds: mapped and analyzed by river basin, with description of existing protection measures, communities serviced, and headwaters.

Geology and groundwater yields: includes description and map of principal rock types, assessment of rainfall and yield by season, and assessment of contamination problems. Also includes tables showing type of water source for all housing units summarized by township and number of wells and well yields for each principal rock type.

Floodplains: includes description and map of 100-year floodplains and alluvial/hydric soils, and a table illustrating the frequency and duration of flooding and water table depth by type of soil.

Wetlands: includes a discussion of the environmental benefits that wetlands provide, an assessment of the type and nature of wetlands in the region, and a description and map of wetlands using information from the National Wetlands Inventory, LANDSAT satellite data, and field surveys.

Land resources

Soil conditions: includes tables and maps showing method of sewage disposal for all housing units by township, assessment of soil limitations for septic tank absorption fields, and for dwellings without basements.

Plant and animal resources

Includes maps of wildlife corridors, vegetation, and habitats, and assigns each natural area a rating for significance, integrity, and threat.

The information base concludes with identification and mapping of primary and secondary conservation areas, and a Development Constraints Map, which consists of overlays for floodplains, steep slopes, and impermeable soils. Primary Conservation areas include "sensitive environmental resources, historically significant sites, and features considered unbuildable because of their limitations or inherent unsuitability for development."

Figure 4. Illustrative goals and policy statement (from Orange County Comprehensive Plan)

Goal Five: Direct growth to areas where it is desirable and can be accommodated

Policies/Actions

5.1 Designate land in water supply watersheds which encircles the water supply impoundment and which drains directly into the impoundment and into the main channels of trunk streams feeding the impoundment as Water Quality Critical Areas, not suitable for moderate to high density residential development or nonresidential development.

Goal Nine: Efficient provision of water and sewer services

Policies/Actions

9.1 Develop and implement a cooperative joint planning process among municipalities and other agencies responsible for water and sewer services in the county, to guide extensions in accordance with the land use plans and policies of the affected jurisdictions.

9.2 Establish a joint Urban Services Area for municipalities A, B, and C that will correspond to the 20-year transition areas of their coordinated municipal land classification plans.

9.3 Prohibit water and sewer services in areas designated Water Quality Critical areas, except to address emergency situations.

Goal ten: Clean and safe water supplies adequate to meet future needs of the residents of the county.

Policies/Actions

10.1 Adopt and implement policies which specify land use patterns and intensities of development in water supply watershed and watershed critical areas that will minimize potential adverse impacts on water quality.

10.2 Designate prime future reservoir sites to protect those areas from adverse development impacts while ensuring that inappropriate restrictions are not placed on a large proportion of the population or land resources of the county.

by state policy and locations where water quality is an issue.

The plan should also include an intended development management program, which may be one integrated program or organized into separate parts. For each component, the development program should specify its content, geographic boundaries or location, relative priority and timing, and the agency responsible for implementation. Finally, the development management program should be followed by a monitoring and evaluation plan that is integrated into the implementation process.

Conclusions

The Coastal Area Management Act: A model?

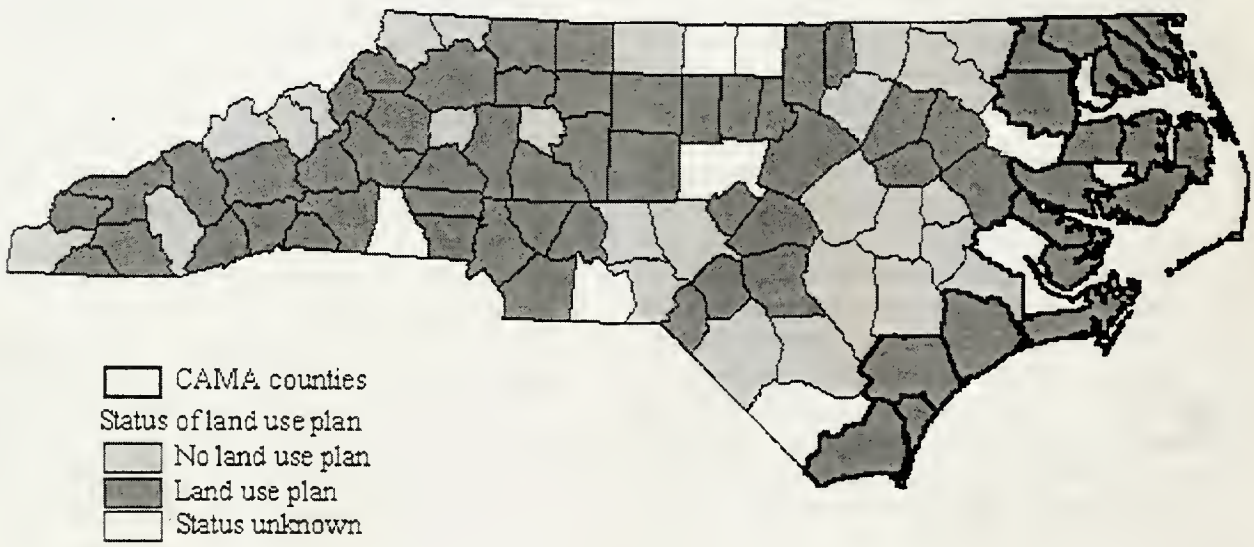
CAMA has raised the baseline standard of planning, especially regarding water quality issues. CAMA plans (See Figure 5 for CAMA counties) are stronger than plans elsewhere in addressing water management as part of a natural, environmental process. CAMA plans address wetland protection more than Piedmont and mountain municipality plans. Ninety-one percent of CAMA plans provide adequate protection of wetlands, compared to less than 20 percent of non-CAMA plans. Protection of aquatic environment is stronger in CAMA plans – it was evident in 78 percent of CAMA plans compared to about 20 percent of non-CAMA plans. CAMA plans are also consistently stronger than non-CAMA plans in their treatment of water quality issues related to human-made water management systems. Over 75 percent of these plans address protection of the public water supply, sewer service area and on-site wastewater treatment/septic use. However, CAMA produced few model plan elements, and the overall quality ratings of CAMA plans were not significantly better than non-CAMA plans. In particular, CAMA plans are weak in prescribing goals and strong overarching policies. They ranked significantly behind non-CAMA plans in specifying a pattern of future land uses.

Although the CAMA program does not require regional planning efforts, it arose from the focus on the statewide and regional impacts of multiple local plans on water and air quality. By requiring localities to create plans and follow a set of guidelines, CAMA has certainly improved the state of planning in the coastal region, but it has not led to an integrated regional planning effort. CAMA could further improve the state of planning by requiring a stronger connection between information base and strategy, inclusion of a land use design, and regional policy coordination for protection of environmental resources and processes on the coast.

Implications for regional and statewide planning efforts

Community plans, even CAMA plans, do not adequately address statewide requirements or intergovernmental cooperation. Whether a plan accounts for and adequately incorporates existing polices at other levels of government will affect

Figure 5. Status of land use planning in North Carolina, by county.



the implementation of the plan, particularly for issues that have regional implications or that are affected by extraterritorial development patterns. Approximately half of all survey respondents indicated that their plans accounted for state-designated stream and watershed classifications, with significant variation among types of jurisdictions (fewer than 40 percent of municipalities, compared to approximately 70 percent for counties and for CAMA region communities). Fewer than half of the plans mentioned state policies and requirements in their information base, about the same proportion that mentioned other local ordinances and plans. Only 27 percent of the policy sections referenced regionally coordinated or state-wide strategies, and 35 percent proposed mechanisms for intergovernmental coordination.

The existence of consistently strong comprehensive plans across the state will still not ensure the protection of water quality. The types of issues faced by the communities we surveyed reveal the need for regional efforts to protect water resources. For example, Orange County contains streams feeding public water supplies in Orange, Durham, Chatham, Person, and Alamance counties. State requirements can be used to ensure minimum levels of protection of such streams, but in many cases communities will be unable to implement strategies for protection without coordinating with adjacent communities. Existing joint city/county planning efforts provide rough models for interjurisdictional plan-making, but communities need guidance on how to devise intergovernmental strategies for particular resource protection issues that cross county boundaries. The state could promote regional planning by providing such models in conjunction with a set of general planning guidelines similar to those we have outlined here. Such guidance could help communities achieve the water resource goals that are so important to the sustainability of their future development. CP

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Endnotes

[1] For simplicity, we refer to municipalities under 10,000 population as "towns" and municipalities over 10,000 as "cities."

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Regulatory Costs: Who Pays in the End?

Residential Developers' 'Rule of Thumb' and the Incidence of Regulatory Costs

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Since the turn of the century, governments have placed restrictions on the location and characteristics of new buildings, the primary reason being the recognition that new construction created negative side-effects for surrounding residents.[1] Consequently, it is difficult for most housing analysts to advocate eliminating all government regulations relating to housing production. However, there is disagreement among housing policy observers about what level of regulations is socially desirable. The key task of researchers is to establish the costs of regulation so that the benefits of these regulations, which accrue both to the home buyer and residents of the larger neighborhood, can be compared to the costs incurred by housing consumers. Therefore, proper measurement of regulation costs is an essential element of any policy debate surrounding regulatory reform of the housing development process.

Many studies have attempted to quantify the effect of government regulations on home prices. A large number of these studies identified a positive and significant relationship between home prices in a given geographic area and the presence of regulations, such as large-lot zoning requirements, growth controls and subdivision standards (for an excellent review of this large body of literature see Fischel 1990). Moreover, some housing market analysts argue that home ownership has moved beyond the reach of many American families because of the costs associated with complying with unnecessary government regulations.[2] While providing some evidence of the effect of government regulations, there has been little research about the *decision process* used by developers when faced with government regulations. Therefore, previous studies have concluded that regulatory costs have one of two effects. Some studies show costs are passed forward on a dollar-for-dollar basis to consumers in the form of higher prices. Alternatively, some studies show government regulations are passed back to landowners in the form of lower values for developable land.[3]

In this article, we argue that the ratio of the effects of regulations on home prices to the costs borne by developers is greater than one. Many developers work under a "rule-of-thumb" that home prices should be between two to four times the price paid for land. Consequently, government regulations that

result in relatively small increases in land costs can result in large increases in the asking price for new home. For example, a regulation that results in an additional $10,000 in costs to the developer would actually be passed on to the buyer as a $20,000 to $40,000 increase in final costs. Obviously, market conditions will affect the ultimate price paid by consumers; however, to a certain extent, new home prices will reflect some multiple of regulatory costs associated with the development process. If so, regulators must be aware that regulations with seemingly modest effects on land prices may result in relatively high increases to newly constructed home prices.

The remainder of this article is organized into four sections. The next section presents a schematic model of a developer's decision calculus along with a discussion of how government regulations affect the development process. In the third section, we develop a model to explain why government regulations would have a multiplied effect on prices. In the fourth section, "Methods and Analysis," we present our research methodology and results. The final section provides a discussion of the policy implications of our findings.

A Conceptual Framework

Figure 1 illustrates a developer's decision calculus. The model is predicated on the assumption that a developer has some predetermined notion of both the types of regulations they will face and the time needed to complete the project. Therefore, a developer's decisions will reflect the answers to several questions. Did they know beforehand what the restrictions were, and then factor them into project planning? How did he or she respond to the restrictions: By seeking to change them? By offering less for the land than he or she otherwise would? By changing project design? By changing the pricing of units? Or did he or she miscalculate the costs or delays so that the bottom line was reduced?

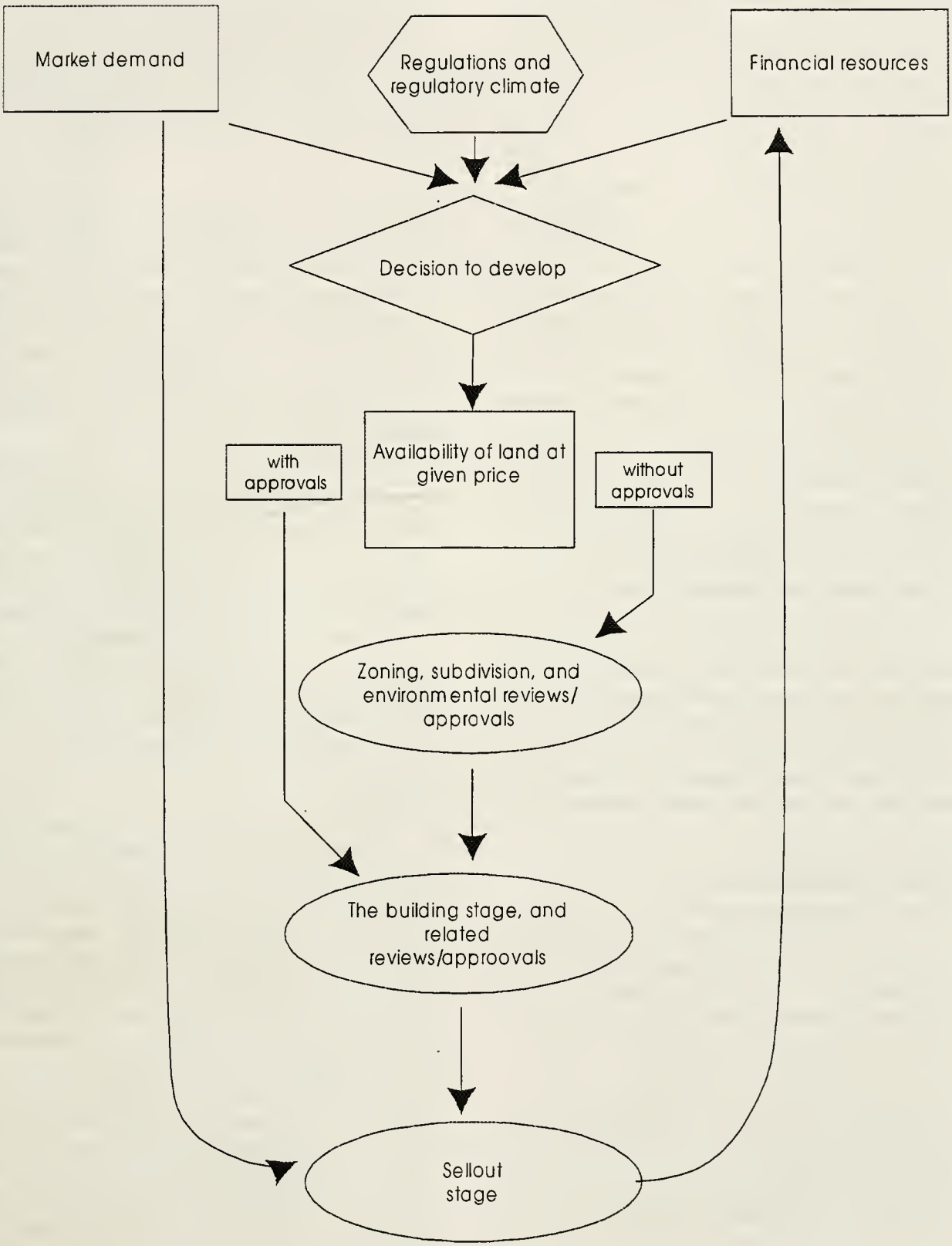
The development environment that exists when a developer contemplates a project includes several components. There is the aspect of market demand (the types of units the buying public wants built), an element affected by macroeconomic conditions, demographics, and tastes. The financial resources available to the developer is a factor affected by macroeconomic conditions and the developer's past success. The development environment also incorporates the regulatory milieu, which includes applicable ordinances and statutes, precedent, and practice in particular places.

Once a developer decides to embark on a project (taking into account the three factors just discussed), he or she attempts to find land that is "priced right." That may mean land that is part of a bankruptcy or under Real Estate Investment Trust (REIT) control -- resulting its being priced under market value. On the other hand, the parcel may be so large that it is affordable for only well-capitalized buyers. The developer's search for the right price may also mean a seller will accede to terms the developer considers favorable, including a discounted sale price, or a sale conditional on obtaining necessary approvals.

The price of land should reflect whether it has approvals in place. If it does, building can begin prior to final approvals for foundations, hookups, or other such items. There may be delays, but they normally will be shorter than in the absence of prior approvals. When land is bought without approvals, the developer must seek them. Whether or not a developer paid a "proper price" for land will depend on how long and costly the approval process was relative to what he or she expected. A developer obviously wants to get to the sellout stage as quickly as possible. If there are unexpected delays along the way, market demand may have changed, making the product hard to sell at the desired price. If land is bought outright, there are also carrying costs associated with delays.

Both the timing of the development process and the accuracy of all actors' expectations determine the incidence of the regulatory burden. In a world of perfect information -- no surprises -- and complete mobility of capital, stricter requirements for developers and longer delays would not negatively affect developers in the long run. If they acted rationally, they would not stay in the development business if they could not earn a risk-adjusted, economy-wide, average rate of return. Rather than tie their resources up in building, and earning, say, a 6 percent rate of return, they would seek higher returns by, say, investing in equities or manufacturing widgets. That would reduce the supply of housing being built and raise the price because of excess demand. That should induce more builders into the regulated market. Consequently, the likely long-run incidence is either on homebuyers, who pay higher prices, or on landowners, who receive lower offers, or both.

Figure 1: Model of a developer's decision-making process



However, the incidence of regulation costs is also affected by the fact that there is a limit on what homebuyers can spend annually for a house, normally about 30 percent of gross income. As the cost of regulation drives up housing prices, demand falls and the bottom end of the housing market drops out, leaving mostly high-end houses in the building pipeline. Thus, lower and middle-income households bear the burden, not simply through higher home ownership costs, but through the unavailability of homes in their price range. Presumably, rents rise as well, in which case there is a loss of consumer surplus. Or there could be a welfare loss due to doubling up, living with parents, living farther away from work where housing is less expensive, and so on.

The outcomes of the regulatory processes we describe may deviate from what legislators and regulators intended when drafting statutes, ordinances, and rules. For example, staff shortages tend to create delays in application reviews. In addition, multiple reviews at different levels of government extend the permitting timeline and may lead to inconsistent discretionary requirements. Also, regulators who have some flexibility (to accommodate a wide range of sound proposals) sometimes use it to deny or delay projects that may be in technical compliance but fail to meet the spirit of the rules. Similarly, public hearings and court appeals, intended in part to ensure that government officials follow the rules, are also powerful tools for opponents of developments. Foes can use hearings to politicize an approval process and convince elected officials not to follow the rules, or to delay and/or kill projects.

A Model of the Effects of Regulation on Home Prices

Our working hypothesis is that some costs of regulation resulting from factors discussed above will result in price increases that are greater than the actual costs borne by the developer. This hypothesis is based on the simplified housing production model in Equation 1:

$$H = \Lambda S^{\alpha} L^{\beta} \qquad (1)$$

H is the output of housing, measured as a bundle that includes land and buildings; S and L represent structures and land, respectively; and Λ, α, and β are parameters that represent neutral technical progress and the shares of structures and land in production, respectively. Assuming constant or slightly increasing economies of scale, α and β will each be less than 1.

Differentiating (1) with respect to land ($\partial H/\partial L$), and setting that equal to the real "rental rate" on land (r), as would be appropriate in long-run equilibrium, yields the expression shown in Equation 2:

$$pH = \frac{rL}{\beta} \qquad (2)$$

Here, pH is the cost of housing and rL is the cost of the land required for its production. A dollar change in the numerator on the right hand side, due, for example, to regulation, changes the left hand side by more than a dollar, as long as β is less than one. For example, for a parameter value of 0.5, a dollar increase in the cost of land (rL) would have to be accompanied by a two-dollar increase in the cost of housing (pH) for the equality to hold.

The smaller β is (less than one), the larger ΔpH for any dollar change in rL. Since β is directly proportional to the elasticity of demand for housing with respect to the price of land, we can see that less elastic demand allows regulatory costs to be passed forward more readily. Because land is immobile, there should be a lower own-price elasticity of demand for it than for structures (this was theorized by Sommerville in 1996). This hypothesis was tested using data collected from builder/developers in New Jersey. A discussion of the data and the results follow in the next section.

Methods and Analysis

The results presented in this paper are derived from a larger study of developers and regulators in New Jersey and North Carolina.[4] As part of the study we conducted two types of primary data collection efforts. The first type of data collected was from questionnaires mailed to a stratified sample of 850 builders/developers in New Jersey. (The sample was stratified in order to ensure geographic coverage of the entire state.) Two hundred builders/developers throughout the state were randomly selected to receive a "short" questionnaire; longer questionnaires were sent to the remaining 650 builder/developers in each of four regions: the New York commuting shed; the Route 1 corridor; the Philadelphia commuting shed; and elsewhere in the state[5]. (Luger, et al., 1998, presents details of the survey methodology, sampling strategy, and validity issues.) Because our initial response rate was low (approximately 12 percent), we expanded our sample size for

the short form by 300; we also sent several hundred replacement questionnaires to the original sample.

The second type of data collected came from telephone interviews with 66 builder/developers drawn from the same sample as our mail survey. We divided the interviewed parties into four panels. The first panel of respondents was asked the following questions:

Assuming that there is a demand in your market for completed homes selling for $500,000 on half-acre lots:

- *In a typical case, what is the most you would put into the hard costs to build the house and appurtenances (brick, lumber and direct labor?)*
- *In a typical situation what is the most you would pay for that improved lot, with all approvals in place (construction, subdivision, and environmental)? (Disregard the possibility of additional costs for impact fees, dedications, etc.)*
- *Again in a typical case, what is the most you would have paid for that same lot in a subdivision if approvals were in place, but without any improvements?*
- *What is the most you would have paid for that same lot in a subdivision, but without either approvals or improvements?*

We also asked these questions to the same panel of builder/developers for a $500,000 home on a two-acre lot. Panel Two was asked the same questions for half- and two-acre lots, but for a $250,000 selling price. Panel Three was asked the questions for a $125,000 home on a half- acre lot, and Panel Four for a $750,000 home on two acres.

The "willingness to pay" questions are consistent with the contingent valuation approach commonly used in environmental research.[6] In this case, our purpose was to ascertain how builders value approvals and improvements. We used differently valued properties to account for possible non-linearities in the demand curve. Table 1 reports the mean values.

Note that the price paid for improved, approved land plus the cost of non-land improvements do not sum to the selling price. In part, this is a consequence of the data distribution (summing mean values); however there is also a profit margin to consider.

The table indicates the following rates of return to builder/developers:

- For a $750,000 home on 2 acres: 23.7 percent
- For a $500,000 home on ½ acre: 22.6 percent
- For a $500,000 home on 2 acres: 25.3 percent
- For a $250,000 home on ½ acre: 13.4 percent
- For a $250,000 home on 2 acres: 8.9 percent
- For a $125,000 home on ½ acre: 13.0 percent

Those estimates are consistent with what developer/builders claim in follow-up interviews among a subsample of questionnaire respondents: that higher rates of return accrue to higher-valued property, perhaps because the price elasticity of demand for housing is relatively small for the highest income households, allowing more regulatory costs to be passed forward. (Note that the figures are rough proxies of actual rates of return, because they do not include financing costs, and are not annualized.) The longer a development project takes, the lower the annualized rate of return, which is the relevant indicator of financial viability. The data in Table 1 roughly agree with our mail survey responses from New Jersey builder/ developers. The median price of new homes built by our respondents was $236,000, and the median size of a developed lot was 0.8 acres. The raw land component of that parcel was $24,000, and the median per parcel cost for improvements was $27,900.

The responses in Table 1 can be translated into the costs for approved, unimproved and improved, approved lots, as shown in Table 2.

The offering prices in the table are hypothetical. For example, a developer would be willing to pay $27,187 more for unimproved land with approvals than for unimproved land without approvals for a planned $500,000 home on half an acre. As expected, the more expensive a home, the larger this difference. (Note that the relatively small differences between the mean values for one-half acre and two-acre lots were not significant as measured by a t-test.) The first row in each panel of the table also provides a basis for estimating improvement costs, which range from 10.7 percent to 15.1 percent of the sales price. It is worthwhile to note that the written developer surveys revealed that hypothetical cost of improvements, if weighted by the mix of different-valued homes in New Jersey, would be in the $22,000 range. The survey responses indicated that per-lot improvements were 11.8 percent of the sales price.

Table 1: Summary of developer survey results

Panel One: $500,000 house

	1/2 acre lot		2 acre lot	
	Mean value	No. responses	Mean value	No. responses
Non-land costs	$273,077	13	$258,750	12
Improved lot	134,615	13	140,357	14
Raw approved land	84,545	11	78,654	13
Raw unapproved land	51,696	14	56,125	14

Panel Two: $250,000 house

	1/2 acre lot		2 acre lot	
	Mean value	No. responses	Mean value	No. responses
Non-land costs	$135,845	25	$139,026	19
Improved lot	84,700	25	91,024	21
Raw approved land	46,888	20	55,515	17
Raw unapproved land	30,475	20	31,053	19

Panel Three: $125,000 house

	1/2 acre lot	
	Mean value	No. responses
Non-land costs	$76,024	21
Improved lot	34,643	21
Raw approved land	21,235	17
Raw unapproved land	17,343	19

Panel Four: $750,000 house

	2 acre lot	
	Mean value	No. responses
Non-land costs	$404,417	6
Improved lot	201,758	6
Raw approved land	94,583	6
Raw unapproved land	55,417	6

Table 2: Costs of approvals and improvements

Panel One: $500,000 house

	Mean value	
	1/2 acre lot	2 acre lot
Improvements (for approved land)	$55,000	$60,193
Approvals (for unimproved land)	27,187	25,903
Improvements and approvals	80,480	84,233

Panel Two: $250,000 house

	Mean value	
	1/2 acre lot	2 acre lot
Improvements (for approved land)	$42,511	$44,630
Approvals (for unimproved land)	16,381	18,035
Improvements and approvals	53,833	60,068

Panel Three: $125,000 house

	Mean value	
	1/2 acre lot	2 acre lot
Improvements (for approved land)	$21,559	n/a
Approvals (for unimproved land)	1,983	n/a
Improvements and approvals	22,014	n/a

Panel Four: $750,000 house

	Mean value	
	1/2 acre lot	2 acre lot
Improvements (for approved land)	n/a	$128,610
Approvals (for unimproved land)	n/a	39,167
Improvements and approvals	n/a	175,610

Table 2 is based on the assumption that developers have a target market in mind when undertaking projects, and changes in the cost of approvals affect the pricing of land. However, this is an extreme assumption. Consider, for example, a $125,000 house on a half-acre lot. A landowner may agree to sell that lot without approvals or improvements, not for $17,434, but for $20,000. A developer would then assess whether the extra $2,600 could be passed onto a buyer, or if he or she could live with a lower rate of return.

The answer depends on market conditions in a particular place at a particular moment in time (as reflected in the price elasticity of demand).

The issue of the incidence of cost changes for structures and land was addressed empirically by Somerville (1996). He demonstrated that unexpected changes in the cost of land, such as those due to unanticipated regulatory delays, are borne in the short run by builders or developers in lower profits, but unexpected increases in the cost of a structure can be passed on to consumers in higher final prices. Therefore, "builder behavior would be expected to be much more sensitive to land costs because they directly affect the builder's bottom line[7]". Over time, diminished supply would affect prices through normal supply and demand adjustments.

In addition to being supported by the contingent valuation data, the rule-of-thumb multiplier is also evident in our analysis of mail surveys from New Jersey builder/developers. Eight respondents estimated the median increase in the price of a house due to zoning restrictions (which required them to change the design and/or layout of their projects) to be $50,000. Using the multiplier of 4.0 for the ratio between sales price changes and raw land price value, that estimate should translate backward into a raw land price difference of $12,500. Indeed, the respondents who provided an estimate of the change in raw land value due to zoning restrictions gave a median figure of approximately $7,000. The higher implied multiplier (close to 7.0) is most likely an artifact of the small unrepresentative sample of builder/developers responding to that question, but it is of the right order of magnitude.

These findings indicate that there is more than a housing prices, the extent of which will vary from project to project depending on local conditions, house size, land-to-structures ratio, and other factors. This translation occurs whether the cost of regulation is accounted for in the non-land (structures) or land component of the housing bundle, since both share parameters, β and α, are less than 1. However, it is greater for those elements of land costs since $\beta < \alpha$.

That relationship helps us understand the relationship between home prices and regulation costs in some of the survey responses. Builder/developers indicated, for example, that open space set-asides caused them to raise the price of a median finished unit by $3,500. Using a multiplier of 4.0, that means that the actual outlay for additional land was about $900 per unit. Similarly, delay costs tend to translate into higher sales prices with this multiplier effect. For example, we noted earlier that each 12-month delay adds approximately $1,500 per unit in additional carrying costs, which would translate into at most $6,000 more for a buyer.[8] These price translations reflect long-run responses to regulatory costs; in the short-term, builders react in a variety of ways to regulatory costs.

While our findings are based on a relatively small sample, the consistency of the results derived from both the contingent valuation and survey data suggest that a rule-of-thumb is used in practice by developers when determining the optimal capital/land ratio of production costs. Increases in the cost of raw land or the cost of improved land are passed along to consumers in amounts greater than the costs paid by developers. Local circumstances dictate the ultimate incidence of government regulations, but builder/developers attempt to maintain a fixed capital/land cost ratio when developing an initial asking price. The policy implications of this result are discussed in the concluding section.

Conclusions and Policy Implications

The fact that the elasticity of demand for housing with respect to price is less than zero has another important consequence: a dollar added to the price of land due to the capitalization of the required regulatory approval adds more than a dollar to the final selling price. That multiplier ranges from two to six, depending on the value of the property being sold as well as on the way land-price is measured (with or without improvements in place). In general, a multiplier of four is not unreasonable; this means that when a developer expects regulation to cost a dollar (substantively or in procedural delay), on average he or she will attempt to increase by $4 the price of the houses being built.

The phrase "on average" is important, because survey data showed a wide range of actual experiences among builder/developers. Of 57 respondents to a question about the incidence of subdivision requirements, for example, 19 indicated they changed the offer price for land, and 19 said they changed the pricing of units. Similarly, of 64 respondents, 22 said stringent zoning affects their offer-prices for land, while 10 said it affected their selling prices. In addition, 74 of 230 respondents indicated lower land-price offers in response to environmental regulations, while 39 said they charged more for a house. Moreover, the median response by all respondents was that environmental.

regulations reduced a developer's bottom line by 1 percentage point.

To conclude, our article suggests that regulatory costs to consumers, in certain circumstances, may exceed costs borne by builder/developers. Many developers describe a rule-of-thumb where land costs make-up a fixed percentage (usually around 25 percent) of the asking price for new homes. As a result, relatively modest additional costs for land resulting from government regulation may translate into sizeable price increases faced by consumers of new housing. If true, regulators must be keenly aware of the full cost impacts of additional regulations in order to generate an accurate cost-benefit assessment of regulations initiated to foster socially desirable objectives. CP

Endnotes

[1] Lubove, 1981.

[2] Advisory Commission on Regulatory Barriers to Affordable Housing, 1991, Lowry and Ferguson, 1992, National Association of Homebuilders, 1995.

[3] Deakin 1989, Knapp and Nelson 1988, Wachter and Cho 1991.

[4] Luger et al, 1988.

[5] Luger et al., 1998, presents details of the survey methodology, sampling strategy, and validity issues.

[6] The contingent valuation approach is a technique used to value benefits or resources through the construction of a hypothetical situation. Individuals are surveyed and asked to value the good in question based on information presented in the background scenario. For more information, refer to Paterson, Luger and Lindsay 1995.

[7] Somerville, p. 410.

[8] This translates into 2.54 percent of the median housing price per year, or 0.2 percent per month. This is less than the 1.2 percent per month estimated by Seidel (1978), which presumably reflects changes in interest rates and housing values since that time.

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Reining in Denver's Sprawl

Building Consensus on Regional Growth Management

Marie Venner

The Denver metro region, like many areas of the country, is experiencing rapid growth in a context of weak regional institutions and multiple jurisdictions within the region. In March 1997, representative elected officials from cities and counties on the Board of Directors of the Denver Regional Council of Governments (DRCOG) voted almost unanimously to approve the Metro-Vision 2020 Plan specifying a 700 square mile extent of development in 2020. This plan represented an increase of about 150 square miles over the region's existing 550 square mile extent, somewhat less than through the lens of dispute resolution theory, a case study of Denver's regional planning process offers insight for planners involved in voluntary regional planning efforts in other areas of the country.

Historical Overview

Starting around 1990, DRCOG took a different approach to regional planning. Whereas the agency had been promoting concepts such as urban centers that had been around for decades, DRCOG planners sought and received permission to conduct a wider, more participatory planning process. Skyrocketing population growth averaging about 10.9% annually in the southern three counties between 1990 and 1994 (Romano 1994:31A) added impetus to the effort. The Clean Air Act Amendments of 1990 and the Intermodal Surface Transportation Efficiency Act of 1991 created additional incentives. These Acts required metropolitan regions to create a fiscally-constrained plan for future transportation investments, as well as one that would not exacerbate air quality, congestion, vehicle miles traveled, and auto dependence. Tax and spending constraints imposed by referenda also limited the state's ability to invest in new infrastructure and required the State to figure out ways to return tax dollars when the burgeoning population growth boosted state income.

Early MetroVision committees carefully examined alternative growth patterns and produced a regional "Framework" for growth management, including these six core elements:

- **Development confined to 700 square miles in 2020**, accommodating population growth and adding 150 square miles to the area.

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- **Free-standing communities** of Boulder, Brighton, Castle Rock, and Longmont, separate from the urban area, with an adequate employment-housing balance and internal transportation systems.
- **Urban Centers**—a range of activity centers in the region that serve as transit destinations; support retail, employment, and housing; contain higher densities than the regional average; and encourage pedestrian-oriented travel.
- **A balanced, multimodal transportation system** that improves the existing system and includes rapid transit, a bus network, regional beltways, and bike and pedestrian facilities.
- **Open space**—a regional open space system that shapes the region's form, protects environmental resources, and provides recreational opportunities.
- **Environmental quality**—acknowledging that the location and type of growth and development have significant effects on the region's air and water.

DRCOG Board approved the guiding ideas in the Framework and appointed a Steering Committee (SC) to discuss implementation of the plan. In order to build ownership among this key constituency, three-fourths of the 15-20 members were elected officials. Representatives from environmental, neighborhood, and business interests made up the balance.

At the first meeting, elected officials made it clear that they would not seek additional authority for the regional agency and would only endorse a voluntary plan. Subsequently, the Steering Committee devoted itself to explaining the needs and issues of the participants at the table, particularly those of local jurisdictions as seen through the eyes of elected officials.

DRCOG described the Steering Committee's agreement on (the) six core elements as "critical to the implementation of MetroVision" and "a major achievement of the group" (DRCOG 1996:3). They reaffirmed the concept of a 700 square mile limit to the metro area in 2020, though the Urban Growth Boundary line and accompanying flexibility provisions were not negotiated and approved until December 1997, with a minor upward adjustment to 730 square miles. DRCOG staff have been careful to avoid pushing member jurisdictions too hard, feeling that the agreement has always been "tenuous at best" (Woodard 1997). Nevertheless, agreement on both the actual boundary and policies for transferring growth from one area to another within the boundary is a significant achievement. Despite the recent failure of a transit ballot initiative, the Board members on the MetroVision Policy Committee decided to retain the transit core element.

Meet the Players: A Stakeholder Analysis

The Steering Committee brought together stakeholders from the sectors active in the initial visioning and scenario evaluation process with a broader group of elected officials than had previously participated. In explaining the negotiation process, this analysis of the power, resources, interests, and strategy focuses on six major stakeholders: the Denver Regional Council of Governments, the city of Denver, the surrounding suburbs, the business community, homeowners, and environmental groups.

Stakeholder: Denver Regional Council of Governments (DRCOG)

Power: As a designated Metropolitan Planning Organization (MPO) under ISTEA, DRCOG controls the purse strings for transportation projects in the region. ISTEA confers the power to the Transportation Division of DRCOG to prioritize transportation projects, to detail the criteria by which projects will be evaluated, and to utilize federal mandates and regional development goals as outlined in MetroVision. As the largest section, governing annual expenditures far in excess of any other section, the Transportation Division of DRCOG has traditionally enjoyed a large amount of independence and power within the agency. However, the section has not utilized this power to advance a system to evaluate proposed projects

that favor either compact growth or alternative transportation modes.

The Development Services Division of DRCOG is much smaller, with comparatively less authority and less ability to dictate their agenda. DRCOG gives approval for the construction of lift stations for the central sewer authority and provides input to decisions of the State Water Quality Control Commission. The Development Services Division provides population and employment data for regional planning and local governments as well as for the transportation division. Like most voluntary councils of governments, DRCOG has traditionally been weak and relatively ineffective at controlling growth across multiple jurisdictions.

...the MetroVision process... opened the regional planning process to a wider group than ever before and brought technical analysis to participants' level

The agency itself has no state-enabled planning enforcement authority. The Board of Directors, comprised of locally appointed elected officials from each jurisdiction, exerts significant influence over the agency's direction. Withdrawal of dues or an uprising on the Board loom as implicit threats over any DRCOG staff action that the Board of Directors perceives as "out of line."

DRCOG's power emerges from the staff's technical expertise and leadership position in organizing committee agendas and framing complex issues. Arguably, the staff's power increases with the technical complexity of the subject or process at hand and the resulting need for expert leadership. However, the MetroVision process, largely conducted by the Development Services Division, opened the regional planning process to a wider group than ever before and brought technical analysis to participants' level. In doing so, they enabled democratic decisions to be made on committees.

Resources: DRCOG's main resource is its staff time, expertise, and leadership. In addition, DRCOG enjoys wide respect as a source of data, and its staff has a reputation as technically excellent and honest brokers. DRCOG's Development Services staff has served as negotiators with individual municipalities over allocations of population and urban land development. This work gives DRCOG staff a politically and technically keen understanding of municipal population growth and development issues.

Interests: The interests of DRCOG staff may be distinguished from those of the local elected officials comprising the Board of Directors. DRCOG staff works full time for an agency with a regional focus, whereas the elected officials hold primary allegiance to their local governments. By implication, those sitting on the Board of Directors will support regional goals as long as local priorities are not compromised. Meanwhile, DRCOG staff is professionally focused on addressing regional concerns and complying with federal mandates, in a manner that is acceptable to local authorities.

The key interests of the Transportation Division were to recommend technically sound projects that would ease congestion in the region; produce objective project rankings that would stand up to the more subjective considerations of political representatives on oversight committees; implicitly maintain the section's independence and power within the agency; keep transit planning at the Regional Transportation District (RTD); and reserve federal State Transportation Program (STP) funds for non-transit transportation needs, mainly roads. Transportation staff showed little interest in what they saw as a Development Services exercise of questionable future and marginal feasibility.

Strategy: DRCOG staff saw their role largely as coordinators, though the leadership potential of their position was particularly important to early MetroVision staff members. Staff who came on board in the late 1980's and early 1990's were more willing to take a more proactive role, not having suffered through the lack of cooperation from municipalities around the region on earlier development plans and information collection activities. Staff devoted to serving

the earlier MetroVision Task Force presented considerable background information on progressive options and lobbied for a thorough analysis of the impacts of multiple growth scenarios. Behind the scenes, more enthusiastic staff funneled additional information to like-minded stakeholders on how growth management was being accomplished elsewhere. Like their successors serving the Steering Committee and subsequent MetroVision Policy Committee, DRCOG staff evaluated progress internally and planned agendas for upcoming meetings at weekly strategy sessions. They revised discussion drafts based on stakeholder feedback in committee meetings, attempting to remain true to the changes and desires expressed by committee members. They presented information and served as informal facilitators at some meetings.

As the process evolved and broadened, staff turnover occurred and elected officials began to play a larger role. Throughout this transition, DRCOG's MetroVision leadership began to play a "more conciliatory" role (Woodard 1996). In particular, DRCOG made a strategic decision to cater to elected officials' private concerns that the agency would involve the public and potentially make an end run around elected officials' authority.

The Steering Committee began its work with substantial opposition to the Framework recently approved by the Board and many of the Committee's own members. Given this opposition, DRCOG decided to play a less visible role and avoid a potentially controversial one in which staff could appear to be pushing the plan. Instead, staff brought in outside facilitators with particular credibility with elected officials.

DRCOG's Transportation Division opted for minimal participation in the MetroVision process and little coordination occurred between the different sections. In this manner, DRCOG lacked a unified internal strategy, a weakness that only revealed itself after the Steering Committee completed its work.

Stakeholder: City of Denver

Interests: Hemmed in by an inner ring of poorer suburbs and an outer ring of richer ones, the City and County of Denver share many of the problems and interests as other central cities. Financial stability is important to the city, and infill, re-development, and limited new development opportunities in this land-locked jurisdiction have traditionally offered few opportunities to extend and solidify the city's tax base. As the hub of a large region trying to maintain an attractive metropolitan identity in the national economy, the unified City and County of Denver has particular interest in maintaining aspects of the area's quality of life such as open space, air quality, and transportation systems.

Hemmed in by an inner ring of poorer suburbs and an outer ring of richer ones, the City and County of Denver share many of the problems and interests as other central cities.

From the city's perspective, large suburban expenditures for new roads and wastewater treatment could drain funds that might otherwise be applied to transit, which would connect the region and enhance the viability of the downtown and inner suburbs. Denver preferred an enforceable regional plan that unified land use, air quality, and transportation planning, interests that were identical to those of DRCOG's MetroVision staff.

Resources: Resources at Denver's disposal included its financial and technical support and the influence and visibility of Mayor Wellington Webb.

Power: Denver's power on DRCOG Board and the MetroVision committees has been ambiguous. Denver contributes more to DRCOG than any other municipality, but the city has never exercised an option in the by-laws for voting weighted by contributions. Elected officials in Denver's suburbs feel relatively self-sufficient in their abilities to attract new business, diminishing Denver's negotiating power. Denver often comprises just one more voice, albeit one more noticeable than the smaller suburbs.

Strategy: Denver allocated resources to the MetroVision effort including staff members who played a leading role early in the process. Denver also consistently supported DRCOG's efforts and allied with environmental interests, which tended to support the interests of the central city. Denver may have opted not to maximize the use of one of their stronger resources, as their highest elected officials rarely participated in the process. Some participants in earlier MetroVision committees noted Mayor Webb's ability to exert a significant influence in meetings, and the ability of such a high ranking official to change or add weight to the tenor of the discussion. Though a Council member still participates, MetroVision may have declined in importance to Denver as the central city has begun to enjoy a spectacular renaissance.

Stakeholder: Surrounding Suburbs

Interests: Suburbs dominate the remaining local jurisdictions with Boulder, Brighton, Castle Rock, and Longmont separate from the contiguous metro area. Most suburban elected officials came into the process with a self-described "preservation" interest in maintaining local control (Tauer 1996). Nevertheless, most recognize the importance of a regional perspective and the need to act on regional issues. As local jurisdictions began to use their voice in the Steering Committee, they made their position clear: they did not want mandates or interference by other jurisdictions, even neighboring ones. They wanted a voluntary, collaborative approach. Despite apparent unanimity on local control, significant diversity and tensions exist among the suburban municipalities. Much of the tension arises out of different growth management programs employed by the jurisdictions. On the one hand, Boulder and Golden have had open space and slow growth initiatives, though one of the latter failed in Boulder in the 1996 election. On the other hand, the Cities of Thornton, Commerce City, Aurora, and Arapahoe and Douglas Counties continue to seek growth. Sales taxes, not the traditional property taxes, are the financial lifeblood of Denver area jurisdictions. The resulting competition for retail development complicates cooperation and predisposes many jurisdictions toward growth; in some municipalities capital improvement plans incorporate funding from projected shopping malls.

Power: Given the "home rule" political environment, suburban elected officials and planning staff has a critical say in whether regional growth management will occur. The key power of local elected officials' is their support or opposition of a plan, which is able to make or break any growth management effort. They exercise this power in the media, on committees, and among colleagues. The DRCOG Board of Directors, comprised of a representative from each of these 41 jurisdictions, ultimately decides whether a regional plan moves forward.

Resources: Local planners provided data and projections for the regional effort. In some cases the work and position of the planning staff hindered regional coordination. In other cases, planning staff enabled the critical support of an elected official by showing that needed reductions in land area could be accomplished.

Strategy: Local elected officials skeptical of growth management utilized all the strength of their negotiating position. They knew that the more powerful one's position, the smaller the negotiating margin needs to be:

> *[Though]negotiations presuppose that neither party has absolute power,...power increases if the costs of not reaching a settlement hurt your opponent more than they hurt you...the stronger you feel, the narrower the margin between your most favored position and your limit...and the greater your commitment to your opening position.*[Kennedy 1982:138-9]

The local elected officials made an early mandate declaring any increased regional authority to be off-limits. This stance depended upon the credibility of the elected officials' supposedly immovable position and the other stakeholders' unattractive or improbable alternatives to negotiation — ballot measures (recently failed) or proposals for state-enacted growth management (unlikely).

Even though the media, interest groups, and DRCOG often accuse sprawling suburbs of generating traffic, congestion, and pollution, some suburbs were set to pin that blame on Denver in

the most recent rounds of Committee meetings. Some planned to use the sell-out crowds at the new baseball stadium and other downtown traffic generators to blame increased traffic on Denver and undercut the argument for an urban growth boundary and confinement of the urban area to 700 square miles in 2020.

Stakeholder: Business Community

Interests: Most participating business leaders saw strong benefits in maintaining the region's quality of life. As long as developers could build to accommodate demand, they had few objections to an urban growth boundary (UGB).[1] The UGB and urban centers concepts could even support developers' interests in building at the higher densities they desired in certain areas. Business leaders appreciated both flexibility and predictability, inhibiting a strong position on either the UGB or urban centers in the Steering Committee process.

Power: Business leaders saw themselves as having significant power, an impression shared by local elected officials. The business community also felt they had significant power to rally opposition to an undesirable outcome later in the process. With the exception of Boulder, developers have always enjoyed a strong negotiating position in the metro area and expect this to continue.

In the MetroVision process, business participants often helped the group maintain a regional perspective in the face of perceived "parochialism" by the elected officials

Resources: In addition to a strong voice, business groups enjoy substantial financial resources. In the past, business leaders considered private consortiums to fund light rail transit and participated actively on state and regional transportation funding campaigns such as the Governor's Blue Ribbon Panel on Transportation (1995-96). Business leaders and mayors were among the most outspoken proponents of the extensive rail system and regional transit initiative named *Guide the Ride*. In the MetroVision process, business participants often helped the group maintain a regional perspective in the face of perceived "parochialism" by the elected officials.

Strategy: Business leaders saw little to contribute to a Steering Committee process largely focused on identifying and resolving the concerns of local elected officials.[2] As the Committee stretched from the original three month estimate into a full year, the business representatives lost patience with the process of slowly generating consensus. They saw no role for themselves and perceived the process as a waste of time for them. The general impression they communicated to DRCOG was "call us back when you're ready to make decisions." The business community had sufficient faith in their strength and they did not feel a need to be at the table throughout the process to preserve their interests. Representatives from the business community attended Steering Committee meetings only sporadically, and environmentalists ultimately recruited their support for substantive commitments in the final agreement.

Stakeholder: Community/Homeowners

Interests: As the sole community representative invited to participate on the Steering Committee, Janie Henley pointed out that one individual can hardly represent the diverse interests of community members across the Denver metro area. According to this representative, "neighborhoods and quality of life go together," and to her neighborhood quality of life meant low density (Henley 1996). However, she did not consider the status quo or future no-action scenario as viable either; she aimed to produce implementation strategies that she thought the public would understand and support. Despite citizens' desire for cleaner air, most oppose multi-family infill. She did not think that increased density, even in urban centers, would sell well in the Denver area and raised concerns about this on several occasions. Elected officials also appreciated the political difficulty of voting for infill development. The interests of a large population of empty nesters, urban professionals, renters, and others who

might favor higher densities were not represented on the Steering Committee, except by the environmentalists. More progressive community interests were broadly represented on the previous MetroVision 2020 Task Force, which developed the Framework and the core elements.

Resources: The community representative felt that the Committee looked to her for fresh ideas and the perspective of an individual homeowner who had thought about regional issues. Her presence and approval added an extra degree of legitimacy to a Steering Committee dominated by local elected officials.

Power and Strategy: The power of the community representative came mostly from her good relations with the local government attendees who requested her participation following her previous service on the Governor's Smart Growth Inter-Regional Council (IRC). In this manner, Henley helped execute the interests and strategies of suburban elected officials, and at least neutralized potential opposition from citizen representatives and any potential alliance with environmental representatives. Though elected officials encouraged her participation, the perspective of the community had less influence on the Steering Committee than on the previous MetroVision Task Force. Like the business participants, the community representative was unsure of what contribution she could make to the Committee and consequently, her involvement was limited.

Stakeholder: Environmental Interests

Interests: Environmental groups sought protection of air quality, open space, and the area's distinctive environmental resources; they favored a regulatory approach, investments in transit, and action on the issues. For decades, environmental activists lobbied for the construction of light rail or utilization of the area's heavy rail for commuters. They favored new enabling legislation that would give DRCOG the authority to enforce compliance with growth management plans.

Environmentalists had serious concerns about the probability of local officials performing in any deal, and lobbied hard to include "effectiveness" along with elected officials' "voluntary" and "collaborative" in the implementation tenets. Environmentalists realized local officials may well have allowed the Framework to be approved without serious objections because they would have a larger say and could reserve fire for the core elements when implementation procedures came to the fore in the Steering Committee's work. Many officials had a "wait and see" attitude and then raised more serious objections as the plan became more concrete. Judith Innes observed a similar dynamic in San Diego, where the Growth Management Consensus Project appeared to play a similar role to that of the large and diverse MetroVision 2020 Task Force.

> *Overall, local elected officials seemed not to mix well with other types of players, nor to be able effectively to represent the concerns of local government in such mixed groups. Local government representatives were not influential participants in (earlier growth management projects). While this...could be attributed to lack of attendance, staff support, and knowledge, an important factor in both cases seemed to be the asymmetry of their responsibilities in comparison to other stakeholders....a city official has to represent a broad consensus across many views....Moreover, local governments are at the center of growth management. They had much at stake but could not take the narrow and effectively focused positions that could be taken by those representing a singular interest.*
>
> *Local officials frequently represented the deeply held views that land use control is and should always be a local function, while many of the other players started with the belief that local land use control is the cause of the problem. The basic difference in style and substance made it difficult to achieve the mutual understanding and respect necessary for identifying and resolving differences. Representatives of local government did far better in working out their positions and needs in groups made up of other elected officials or their staff.* [Innes 1994:35]

These reasons may explain the environmentalists concerns and the local jurisdictions' action on the MetroVision Task Force, DRCOG's subsequent approval of the Framework, and finally, elected officials' emphatic dismissal of an enforceable approach on the implementation Steering Committee.

Power: In some jurisdictions, particularly those adjacent to the foothills, environmental groups successfully placed growth control and open space protection initiatives on the ballot. Though the environmental representatives never explicitly laid the threat on the table, they informed various participants of their intentions to move forward with a Fall 1998 ballot initiative if elected officials failed to move forward with meaningful growth control.

Environmentalists also exerted their influence by trying to keep the issue in the public eye. They had the power and the resolve to "publicly blast" the Steering Committee process if the Committee made no firm commitments (Shaver 1996).

Elected officials' unwillingness to entertain the environmentalists' preferred alternatives restricted the environmentalists' room to press their case during the meetings. The power of environmental groups was also hampered by the failure of growth control ballot measures (open space proposals have been more popular) and the low likelihood that the State legislature would advance a more regulatory approach.

Nevertheless, environmental representatives stayed involved in these discussions and increased their power and credibility through perfect attendance, what elected officials called "reasonable" exchanges with other Steering Committee members, and networking.

Resources: Environmental group representatives, often lawyers, brought technical expertise to the process. Their main resource was their ability to influence public opinion. In addition, environmental groups enjoyed a special relationship with the facilitators and served DRCOG and the facilitators' purposes in the negotiations by representing one end of the spectrum. In this manner, environmentalists' preferred alternatives provided a reference point from which elected officials could differentiate their own proposals, build ownership, and gauge their success.

Strategy: The environmental representatives on the Steering Committee—two attorneys from Colorado Public Interest Research Group (CoPIRG) and the Environmental Defense Fund (EDF)—resisted taking an adversarial point of view or pressing their case.[1]

The environmental attorneys could see that elected officials faced tough issues at home and that the Committee's work was a learning process for them. They agreed with the facilitators' case that if elected officials arrived at the same conclusion on their own as they would have with the environmental community weighing in, the local officials commitment and resolve—their probability of performance in carrying out any agreement—would be stronger. As one of the environmental representatives noted, "If they (elected officials) said it to each other, they were treated with respect...basically, we found others to carry the ball for us" (Shaver 1996). This behind the scene approach required savvy use of networking with potential supporters in all the involved parties.

Factors in Agreement:
Consensus-Building Theory in Practice

DeNeufville and Christensen (1980) argue that top-down regulation is only appropriate when a society knows how to do a task and agrees on a single objective. As the stakeholder analysis illustrates, such agreement was lacking in Denver. Innes concludes that when goals and means are uncertain, as they are in growth management, charismatic leadership or a social learning strategy is needed (Innes 1992: 443). The Steering Committee relied on social learning to move the group forward, with the help of active facilitation.

...top-down regulation is only appropriate when a society knows how to do a task and agrees on a single objective

Facilitation and Mediation

As a block of opponents to any regulatory element coalesced on the Steering Committee and members began questioning core elements of the Framework, DRCOG decided to call in professional facilitators. At the annual overnight DRCOG Board retreat, one small town mayor summed up the doubts of many elected officials when she said that local officials do not get elected by doing good for the region: "I get elected every two years," she said. "I need to be able to sell this to those with local concerns spanning over a much shorter period," (Woodard 1996). A DRCOG staff person highlighted the value of that comment, and noted that it caused them to step back and re-think their strategy.

DRCOG chose two facilitators, John Parr and Peter Kenney, who would have credibility with elected officials and other stakeholders on the Committee. Gray (1989:165) notes that "the power to mediate is derived, at least in part, from the mediator's affiliations and particular interests." Parr's successful campaign experience at the gubernatorial and mayoral levels may have given him extra pull with the local elected officials. The second facilitator enjoyed similar respect; Peter Kenney served as chair of DRCOG's Board of Directors for many years in addition to his prominent roles in Denver. Both worked with the National Civic League. The mediators had significant personal interest in reaching agreement on growth management, as a culmination of their personal and professional work in the region over decades and as a potential highly visible success for their budding private practice as facilitators and mediators. Environmentalists trusted Parr because he had managed campaigns prominently featuring their concerns. Confidence in the mediator enabled the environmental attorneys to trust Parr's assessment that they should take a back seat role in the negotiations and still have faith that their concerns would be addressed.

DRCOG and the facilitators made a strategic decision to attempt to slow the Committee and step back from the implementation task in order to build support and ownership among elected officials for MetroVision's core elements. They knew that moving to implementation without a sound plan could delay progress and jeopardize success.

Parr and Kenney's facilitation gave the group a new sense of focus and helped minimize participant frustration while raising group awareness of their progress. Parr and Kenney came to meetings with an agenda and set expectations for what the group could accomplish in that session. After meetings were underway, the facilitators maintained focus, checked for agreement, enforced process agreements, and encouraged participation. These interventions helped the group identify, address, and resolve issues, as well as avoid conflict. DRCOG staff and facilitators also created a group memory by recording members' observations on flip charts. This record provided the group with "a neutral focus for debate" and depersonalized ideas, allowing the whole group to take ownership (Godschalk 1994:81). After meetings, DRCOG staff compiled perspectives, agreements, and decisions into a single working document for discussion and modification at the next meeting. Wording changes to those single texts formed the basis for participants to achieve their individual interests and ultimately group consensus.

Kennedy, Benson, and McMillan (1982:43) advise that "the more you can get [the person with whom you are negotiating] to talk about his position, by aiming questions for clarification and explanation, the more he may inadvertently give clues away about his commitment to his position and the possible lines along which he is prepared to move." Parr and Kenney provided ample time to hear concerns, which they incorporated into a structured process designed to highlight joint gains. The Committee looked at the pros and cons of each core element and the do-nothing scenario for local jurisdictions and then for the region as a whole.

Humor was an invaluable tool in Parr's bold style; he departed from facilitators' conventional wisdom of accepting and legitimizing all input by participants. As Committee members learned they could trust him, Parr shifted to a more activist, mediator role. He enabled local elected officials to chuckle at their re-iterations of "local control." Hence, Parr helped the group "explain the reasons behind [their] statements, questions, and actions," as part of "sharing all relevant information" and focusing on interests rather than positions

(Schwartz 1989:27). Ostensibly, this intervention served to clarify and reframe, but in reality, it was an invitation to "play" and expand the current boundaries of thought and language on the issue. He invited participants to question their statements, test assumptions and inferences, and develop agreements on what important words meant.

Informal Meetings

Parr and Kenney kept in frequent contact with participants between meetings. Casual conversations and lunches provided opportunities for "carefully assessing human factors as well as technical issues...and designing a strategy for the particular circumstances"(Carpenter and Kennedy 1988: 54). Parr and Kenney thereby facilitated the emergence of issues that had yet to come to the surface, while simultaneously playing a subtle advocacy role. In a version of advocacy planning, meetings with individual stakeholders helped them clarify their own interests and strategy. This strategy also created less risk of divisiveness in the meetings, enabling Parr and Kenney to avoid surprises. In turn, more cooperative meetings helped foster the positive working relationships that enabled people to use the same information, exchange new information, make agreements, and keep their word. Godschalk's framework of conflict types, techniques and forums "assumes that many budding conflicts can be headed off through direct negotiation in less formal organizational settings, thus limiting eruption of 'tooth and nail' conflicts with their win/lose techniques and forums. These less formal settings can be productive negotiation training grounds for networks of planners and public officials committed to integrative rather than zero sum bargaining" (Innes 1994:37).

DRCOG staff are also using informal meetings to work on building negotiation-friendly climates and procedures, identifying issues early and dealing with them forthrightly, recognizing disputes and providing resolution settings to avoid future conflict. Other informal dispute prevention and early resolution mechanisms that could be employed include subregional outreach meetings,[3] periodic conversations and lunches with key players, and regular regional meetings of planners and public officials. These ongoing mechanisms provide a way to address the inevitable conflicts that arise with implementation.

Personal Effectiveness: Building Good Working Relationships

Some group members were able to identify individuals they considered particularly effective or influential in the process. These members exhibited important qualities for successful negotiation, such as balancing emotions with rationality, attempting to understand the perspectives and behavior of others, listening and clear communication, reliability in promises and actions, openness to persuasion based on acceptable criteria, and acceptance of others' legitimacy as serious partners (Godschalk 1994:82).

Regular participants built social capital that facilitated agreement among the Steering Committee members. This enabled a network of trust in which respectful, open-minded and informed conversation could occur, and also reinforced the qualities of good working relationships in Steering Committee interactions.

Participants generally attempted to try to understand the perspectives and behavior of others, and were open to persuasion based on acceptable criteria; environmentalists and the pro-growth Mayor of Aurora were particularly influential in this way. Though the two environmental attorneys had strong preferences for Oregon-style growth control and a regulatory framework that ensured performance, the attorneys primarily listened. They balanced their preferences with a rational assessment of the situation and made a strategic decision to resist championing their cause in exchange for better relationships with their Committee members and the possibility of a significant increase in ownership of the process and commitment to implementation on the part of elected officials. Their patience and restraint enabled the Steering Committee's greatest achievement: elected officials (re)development of and commitment to growth management options they could and would support.

Satisfying Substantive and Psychological Needs of Stakeholders

For agreements to work, "they must be realistic and satisfy the substantive and psychological

needs of the participants and stakeholders" (Godschalk 1994:87). Local elected officials achieved their substantive objectives of local control; those who entered the negotiation specifically to ensure that the program would not become regulatory also met their goal. In general, these participants had the satisfaction of time to air their views and address concerns. They perceived the process as fair and felt others listened to their points. Afterwards, only one elected official complained that environmentalists still played too large a role and that the process was too time-consuming. For Aurora Mayor Paul Tauer, the fairness of the procedures and the sense that his concerns were being heard was critical to his increased confidence in the process and growth management in general.

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Though everyone took pride in the final agreement and was glad to see the MetroVision process move forward, environmental, business, and community representatives enjoyed less psychological satisfaction. In contrast to elected officials, who perhaps had a greater sense of how their attitudes to MetroVision had shifted, other participants expressed doubts about what the process had accomplished. Environmentalists were given less respect and room to speak, and their hope of achieving enforceable growth management was quickly dashed, despite the credibility they gained. The environmental community continues to support the agreement as it moves forward and serves as its strongest advocates.

Accurate Data and Projections

Accurate data and projections were key to successful negotiations between DRCOG staff and local planners in almost every jurisdiction. Disputes over accuracy and an agreed starting point for development projections formed the grounds for only one jurisdiction's "refusal to play." Negotiations with local planners regarding the 2020 growth projections continued throughout and after the work of the Steering Committee. Studies and data generated by previous committees and DRCOG planners also offered an accurate base of information, including considerations of growth scenarios and costs of growth, from which Steering Committee negotiations could move forward. DRCOG planners had already resolved data accuracy and prediction issues with most elected officials in the earlier scenario-building/cost benefit phase of work under the MetroVision Task Force. Had these issues not been resolved, reaching resolution of differences with elected officials on the Steering Committee might not have been possible. Technical information was often used by participants on both the Task Force and Steering Committee to convince one another that a problem actually existed, an "essential first task for consensus building" (Innes 1994:103).

DRCOG acknowledged and respected differences of opinion about data issues in the Steering Committee report, such as the preferred "fudge factor" to be added to the projections. DRCOG's data may also have shaped subsequent negotiations because they came to the table first with long-term projections; many local jurisdictions previously confined their analysis to five year projections and plans.

Predictive accuracy emerged as a critical component of the Steering Committee process when Mayor Tauer, a critical suburban opponent of UGBs and the 700 square mile development area, worked with his planning staff and found that the City of Aurora could meet the 700-mile target (Tauer and Woodward 1996). Confidence in the accuracy of DRCOG's predictions gave other local officials on the Steering Committee with similar concerns the security they needed to make commitments or proceed to the next step, and increased bargaining strength for DRCOG.

Accrued Investment in Negotiations and Agreement

In the end, negotiations were able to proceed because the final product on the table was superior to participants' proposed alternatives. Importantly, DRCOG made sure that the "do- nothing" scenario was included among alternatives, so

when more regulatory or growth limiting scenarios were considered and rejected based on the drawbacks, the deficiencies associated with the current rate of growth and land consumption could be evaluated as well. As the community representative said, all participants realized that "Denver is growing so fast, no one will be very happy" with a do-nothing scenario (Henley 1996). At the very least, those elected officials who would have been happier with the do-nothing scenario became part of a larger process and voted with their peers to recommend Board approval of the revised plan. While some local elected officials may have had a shorter-run view, the cost of impending negotiations with DRCOG on future transportation and water plans also held some uncertainty and risk for local governments. Participants concluded they were better off with the agreement than without it.

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Participants' time and personal investment also factored into the final agreement, functioning as accrual costs. As Innes observed in several California processes, "the desire to have something to show for the months or years of hard work, along with the desire to be supportive to the group with which they had developed working relationships and some common cause, proved to be important incentives to reach agreement," (Innes 1994:37).

Implementation

The Steering Committee's implementation strategies are largely descriptive, but they have several characteristics of a durable agreement. The group seems to have found common ground, feeling that the agreement is mostly solid, fair, and realistic. The agreement is honest because it was "based on the best-available, jointly developed information,...founded on realistic projections of capacities and costs," and "developed with the involvement of all parties" (Innes 1994:42). The product did not disadvantage significant stakeholders who were often absent, such as the business participants.

The acceptability of the agreement is the best factor for its potential implementation. The process used to develop the agreement addressed elected officials concerns regarding local control, previously the greatest obstacle to growth management in the region, and was perceived as fair by all. A greater level of honesty may be present now than when the Board approved the MetroVision Framework without solid support. Furthermore, the agreement provides incentives for all parties to implement it.

Implications for Collaborative Regional Planning

Denver's experience with collaborative regional planning reveals lessons that planners in other regions could use.

Foster an open process, where all necessary information for decision-making is provided to participants. Encourage an openness to hearing and learning from all parties involved. MetroVision benefited from the trust and exploration of new ideas during the multi-year group process. Nevertheless, DRCOG leadership decided to avoid daunting elected officials with the implications of growth management, instead reassuring them that they were entirely in the driver's seat. Consequently, few Denver-area citizens were acquainted with MetroVision, especially in later phases, and the project lacked potential support from greater citizen involvement.

Those who volunteered for or were recruited to MetroVision task forces embarked on a continual learning process about the needs and concerns of other participants and about new growth management options. The DRCOG Development Services staff provided the Committees with all the helpful information at their disposal in order for the Committee to realize the extent of its power and come to the decision it considered best.

The learning and decision-making process among the wide array of participants over the seven-year period was protracted, messy, and po-

litical, but the agreement benefited from the subsequent broad ownership that such a democratic approach generates. Moreover, participants knew the plan and its internal workings inside and out, which cannot be said of participants on many other committees both within and outside of DRCOG. Patience with long time frames, regular participation, and informed, respectful, and open interaction built the social capital needed to come to final agreement.

Use Facilitators. Facilitation provided the Steering Committee advantages the previous task forces did not enjoy. Facilitators ensured that the issues raised were handled in a more systematic manner than on earlier committees. By helping participants identify issues and goals and set agendas, the facilitators gave the Steering Committee greater task-orientation, allowed participants to place their work and progress in context, and helped the Steering Committee note and celebrate accomplishments.

Outside facilitation enabled DRCOG staff to serve the committees as technical assistants without leading the process in such a visible way that group ownership suffered. This level of independent ownership also enabled the facilitators to push the group along in considering various topics and challenging assumptions to an extent DRCOG or more neutral facilitators could never have attempted. The Steering Committee facilitators exercised a wide degree of latitude. The recording facilitator often paraphrased participants' comments to get at the gist of what they were saying, instead of using their own words. The facilitators also conducted outside listening and strategy meetings with individuals and subsets of Steering Committee members, often without DRCOG's or the Committee's knowledge. Other regional agencies seeking facilitation services might prefer more neutral facilitators.

Involve all critical stakeholders. Insufficient involvement at one point in the process may not sink the process if steps are taken to remedy the problem.

The Steering Committee process caught and remedied critical weaknesses in the MetroVision task force process. As leaders in the process, DRCOG thereby avoided some process pitfalls Innes observed in a study of intergovernmental groups whose products have not been used or their agreements shared by the wider public. "In some cases, the groups failed to include key stakeholders, who later sabotaged the effort; in some the groups did not operate long enough;" but "in many, the groups and their findings were not well linked to the institutionalized procedures and political processes by which decisions are actually made" (Innes 1994:451).

The MetroVision Framework gave elected officials something to respond to and provided a basis for further thinking about growth management. In that way, the Framework can be seen as the other stakeholders opening bid in regional negotiations on growth management. Elected officials critically examined that bid and based their counter-offer upon it. The result was an acceptable agreement.

Power disparities cannot be entirely eliminated; they are a fact of life that must be addressed. Though some dispute resolution professionals and academics may criticize the gross power disparities on the Steering Committee, others might conclude that elected officials acted appropriately as the principal decision makers in a process ultimately intended to garner approval of metro area elected officials on the DRCOG Board of Directors. The prominent role of elected officials in the culmination of the Denver region's MetroVision process accords with what dispute resolution and collaborative planning professionals and scholars have learned in other places. Brock and Cormick note that "principal domination of the conflict resolution process, with staff and experts in supporting roles, is necessary to build decision maker commitment and consensus. Thus, in intergovernmental disputes involving elected officials, they must control the negotiation to generate their sense of ownership" (Innes 1992:370). Furthermore, in the two successfully resolved dispute-level dilemmas in another series of case studies of intergovernmental development dilemmas, a working group of elected officials dominated the process (Godschalk 1992).

The local officials' level of participation on the Steering Committee allowed them to generate an important sense of ownership. As Innes observed with group processes to develop growth management plans in other states, the MetroVision process, "created an alliance of key players and leaders who speak for the plan. Many of these players, because they were part of the negotiations, now have a stake in the plan's implementation" (Innes 1992:450).

Utilize existing authorities. DRCOG has significant power to support MetroVision but has not used it effectively. The Transportation Division has maintained an evaluation system in which project prioritization, DRCOG's greatest source of incentives, continues largely as it has in the past. During the Transportation Improvement Plan (TIP) criteria re-evaluation process during May-July 1997, Transportation Division staff reviewed and justified their existing process in great detail but chose not to emphasize the reviewing committee's authority to significantly restructure the ranking system and give greater priority to non-auto modes. Admittedly, many local representatives would not want to see the road projects they submit compete against transit for a pool of funds some consider insufficient. Nevertheless, DRCOG's technically oriented system assumes that project types (ranging from roadway widenings funded by the State Transportation Program (STP) to bike lanes funded by enhancement dollars) cannot be compared based on their adequacy to meet larger transportation objectives. Thus funding is allocated and pools are targeted to each project type. Federal Transit Authority dollars and the Regional Transportation District's taxing authority are assumed to be the sole source of funds for transit in the region, despite ISTEA's attempt to change the rules of the game and the Transportation Division's orders that more free funds be directed to transit. The transit-related goals which abound in DRCOG's Regional Transportation Plan apply only to the regional transit agency, not DRCOG decision-making, though the plan clearly stipulates that plan policies and objectives are to guide DRCOG's TIP criteria. Although the Transportation Division has made some changes to its point system, DRCOG could make greater use of its legislative authority by making the opportunities created by the conjunction of regional planning and federal legislation clear to decision-making boards.

Treat the public as your partner and utilize public opinion. DRCOG responded to pressure from earlier MetroVision Task Force members, particularly community members, non-profit environmentalists, and those from environmental government agencies, to involve the public. In 1994 and 1995 the agency undertook significant outreach related to criteria and scenario-building exercises. DRCOG staff made presentations to local groups and governments, talked on local cable access channels, and set up displays in libraries around the region. A region-wide survey affirmed citizen interest in and support for the priorities of the six core elements of the Framework and subsequent MetroVision Plan. However, the public involvement and communication effort was insufficient, and the effort dropped off considerably in following years.

...public outreach is now more important than ever to the implementation of a plan, which belongs and pertains to the entire metro region

Despite this promising public outreach start, which still failed to satisfy some non-elected official task force members, DRCOG made a strategic decision to return the focus to the Board members, who they optimistically assumed to be representing and communicating with their local constituency as their audience and customer. Despite support from local elected officials on the Steering Committee, the lack of an external communications strategy deprived the MetroVision plan of a potentially large and influential body of support. An early sample survey indicated strong public support for plan concepts, but almost no outreach occurred subsequently.

DRCOG staff say that money for communications outside of report publication has always been scarce at the agency. Hence, the agency employs a strategy far-removed from Portland's, which makes ample use of focus groups, door hangers, regional media inserts, and blanket surveys. While DRCOG staff say regional newspapers have kept the impacts of regional growth in the public eye, newspapers have found it hard to cover a process like MetroVision. Though MetroVision staff responded to the critical need to build support among elected officials over the past two years, public outreach is now more important than ever to the implementation of a plan which belongs and pertains to the entire metro region. DRCOG hired a communications consultant in early 1999, but the focus remains on developing a strategy for communication with regional political and business leaders..

Effective planning can occur in the absence of regulatory authority. At the very least, voluntary, collaborative planning provides an important and sound basis for future efforts, regulatory or not. If long-range regional land use planning efforts waited for regulatory authority in places like the Denver region, they might never happen. Yet fast-growing areas that depend on environmental amenities and clean air still need to respond to the impacts of growth and make choices about investments for the future. In such places, a significant ground of support exists for managing congestion and the untrammeled growth that robs places of their character. Many residents and local leaders are committed to their places, whether they see that as their neighborhood, town, region, or state. Participation in discussion on these issues can lead to agreement. Visioning is an exercise that seeks to extend participants' attention to the region as a whole, drawing out and working from their commonalties.

Greater objections and problems will always emerge as plans become more specific and implementation issues are addressed, but collaborative plans enable participants to try to get all parties on board and experiment with what they can do without regulatory authority. If voluntary noncompliance threatens to obviate the plan, local governments that have "played" and have significant investment and ownership in the plan may call for regulatory authority.

Plans that represent multiple years of effort by stakeholders take on their own momentum. The relationships among participants and social capital can elicit cooperative action where it otherwise may not have occurred. Sometimes buy-in may be acquired easily through time spent listening and an earnest attempt to meet the other's needs. Collaborative planning ensures that this opportunity is not missed. A collaborative approach also defuses the intensity of opposition and greatly decreases the probability that a previously overruled or unheard minority will overturn a plan.

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Staff, local representatives, and stakeholder groups have crafted an entirely voluntary plan with broad acceptance and buy-in, providing a model for regional growth management in a low regulatory environment. The rewards of collaborative and inclusive planning take time, and DRCOG may not entirely deserve the impatience of previous committee members who question what happened to the process and the products of their previous efforts. Planners often neglect to tell the story of the decade-long efforts by the League of Women Voters and Oregon environmental groups before Oregon's growth management plan was enacted in the early 1970s. The state of Oregon, Multnomah County, and Portland are still making adjustments and working out the kinks in their 25-year experiment. The Denver region is in the first stages of its process. MetroVision has created an invaluable foundation for future efforts as well as an experiment in voluntary and collaborative regional planning that provides valuable lessons for future regional planning efforts nationwide. CP

Endnotes

1 From Westword, Denver's independent weekly: "'If we can build to meet the housing demand within the growth boundary, we probably don't have that much of a problem with it,' says Steve Wilson, director of government affairs for the Home Builders Association of Metro Denver. Wilson says homebuilders in Portland, Oregon, a city that's had a growth boundary for almost twenty years, have supported the idea there. What frustrates local developers, says Wilson, is the crazy quilt of government regulations that now exists in the metro area. "We have some communities with arbitrary growth limits," he says, and because many cities fear being overrun by tract homes or apartment complexes "there's continuous pressure for less and less density" (Steers 1996). Wilson adds that homebuilders often propose politically correct high-density projects and then find themselves in a battle with neighborhood groups that want to require large yards for every new home. Wilson sat on later MetroVision committees.

2 On the previous MetroVision task force, business representatives were active but small in number. Interviewed by the Denver Business Journal at the close of the task force process, Anthony Gengaro, a planner with his own firm and a representative of the homebuilding community on the task force said "the amount of growth allowed, which should be plenty, won't be as controversial as how to divide it." Gengaro also said, "most business people don't have the time to sit through hours of meetings. Nor do they like being outnumbered 20 to 1 by opponents....but business must have a role in fleshing out the plan to guarantee it is something everyone can live with." Gengaro also said, "When you can't build consensus, the status quo continues." Task force member and Editor of the Urban Design Forum newsletter, Christine Ford, said she was troubled by the lack of business involvement in the process, which was dominated by government and public interest types. "It hasn't dawned on the business community that if they don't take a hand in it, it could outsmart them" (Svaldi 1995:36A).

3 Nevertheless, DRCOG staff felt that environmentalists undermined their position and further marginalized the environmental community whenever they raised the more regulatory Oregon alternative. Local officials considered that option excluded at the first meeting, and frequently rolled their eyes and became more belligerent when it was mentioned. [Woodard 1996]

4 Elected officials on the Steering Committee made presentations to other elected officials and planners at sub-regional meetings throughout the Steering Committee process. Such meetings offered the committee a helpful feedback mechanism for local input, enabling the committee to discover and address potential problems before they could generate much momentum.

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Master's Projects

The following is a list of Master's Projects prepared by students who graduated from the Department of City Planning at UNC-Chapel Hill in 1998. To obtain a copy of one or more of these projects, contact Patricia Coke at (919) 962-4784.

The Great Debate: A Public Guide to Muddling Through Urban Sprawl. **Karla Ann Aghajanian.**

Partnerships and Cooperation in Transit Station Area Development: Theory, Practice, and Application. **Hiroyuki Akaso.**

Homestead Commons: A Development Feasibility Analysis. **Aaron James Bartels.**

The Proposed Downtown Raleigh Regional Rail Station Area: A Methodology for Evaluating the Feasibility of Implementing a Triangle Transit Authority Policies for Station Area Development. **Karen E. Berchtold.**

A Socioeconomic Analysis of the Raleigh-Durham-Chapel Hill Metropolitan Area. **Angela D. Bernhard.**

Redlining and Reverse Redlining: A Study of Mortgage Lending in Durham County. **Jeanette Marie Bradley.**

Re-examining Public Participation: A Case Study from Chapel Hill, North Carolina. **Kevin A. Bryant.**

Legal and Economic Implications of Multi-Jurisdictional Economic Development in North Carolina. **Susan Elizabeth Campbell.**

The Role of Barter in Community Economic Development: A Local Currency System for Clear Fork Valley, Tennessee. **Brenda Childers.**

The Morrisville Transit Station Area: A Development Plan and Implementation Strategy. **Margaret N. Connolly.**

Applying the Ordered Probit Model to Injury Severity in Truck-Passenger Car Rear-End Collisions. **Chandler Sikes Duncan.**

Linking Growth Management to the Provision of Transportation Infrastructure: A Preliminary Study of the Feasibility of Implementing Concurrency Requirements in Wake County. **Nathaniel Ketil Freeman.**

A Public Involvement Program for High Speed Rail Planning and Decision-Making in North Carolina. **Adena Friedman.**

An Analysis of the Major Investment Study Process: Is the Intermodal Surface Transportation Efficiency Act Fulfilling its Promise? **Lyman Jackson Gregory, III.**

Assessing the Capacity of Community Development Credit Unions in the Southeast. **Isaac C. Henderson.**

From Mean Streets to Mainstream: South Bend's Center for the Homeless and the Continuum of Care. **Maria Pilar Hogan.**

Real Estate Market Studies: A Guide for Community Development Practitioners. **Jennifer Hurley.**

Feasibility Study and Operating Plan for Midway Business Center. **Robert B. Inerfeld.**

Race, Waste and Participation: A Case Study of the Warren County PCP Landfill Siting and Detoxification Process. **Adhir Kackar.**

Taking Aim: How are North Carolina Economic Incentives Targeted? **Laura Deaton Klauke.**

The Importance of Tax-Exempt Status to Housing and Community Development Nonprofits: The Implications of Partnership Activities on Tax-Exempt Status. **Cassandra Vinson Knight.**

Serving the Poor in Transition Economies: An Evaluation of Targeted Municipal Service Subsidy Programs. **Kristin Komives.**

Development Translations: Bringing the Grameen Bank's Peer Lending Model to North Carolina. **Diane Kay Levy.**

Conservation Subdivision Design: An Effective Tool for Managing Land Use, or Simply Well-Designed Sprawl? **Philip C. Mason, Jr.**

Characteristics of North Carolina Technological Development Authority, Inc.'s Small Business Incubators. **Laura Elise McGlamery.**

Site Conservation Plan for the Bladen Lakes Region. **Bonny Ann Moellenbrock.**

The Environmental Impact of Farmland Preservation Policies. **John C. Nemeth.**

Errant or Arendt Policy: An Assessment of Whether Cluster Development, in Practice, Preserves the Valuable Functions of Open Space. **Todd Christopher Owen.**

A Different Vision: A Study of Preservationists in North Carolina. **Dorinda L. Peacock.**

Geographic Information Systems (GIS) in Local Coastal Hazards Planning. **Junko Peterson.**

Environmental Review Handbook—Department of Housing and Community Development—Greensboro, North Carolina. **Dianne F. Pickel.**

Funding Sources for North Carolina Business Incubators. **Catherine Elizabeth Reilly.**

Microcredit as a Tool for Women's Empowerment. **Abikok Riak.**

A Development Management Program for Implementing a Neighborhood and Urban Transit-Oriented Development in Orange County, North Carolina. **Stephan Mark Rodiger.**

Sign Regulations and the First Amendment. **Mark Howard Shelbourne.**

Communicating to the Public About Affordable Housing. **Ivy Ruth Sidberry.**

The Story of Smart Growth: An Analysis of Maryland's Most Recent Round of Growth Management Legislation. **Carol Susan Spector.**

Access to the World Wide Web: A Matter of Both Policy and Design. **Jeffrey Scott Triezenberg.**

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